EiP
EXCELLENCE IN PEDIATRICS

PRAGUE
6-8 DECEMBER

CELEBRATING 10 YEARS

IMPROVING CHILD HEALTH GLOBALLY

10th EDITION

2018

CONFERENCE PROGRAMME

www.ineip.org

ORGANISED BY

Excellence in Pediatrics INSTITUTE

Excellence in Pediatrics COMMUNITY

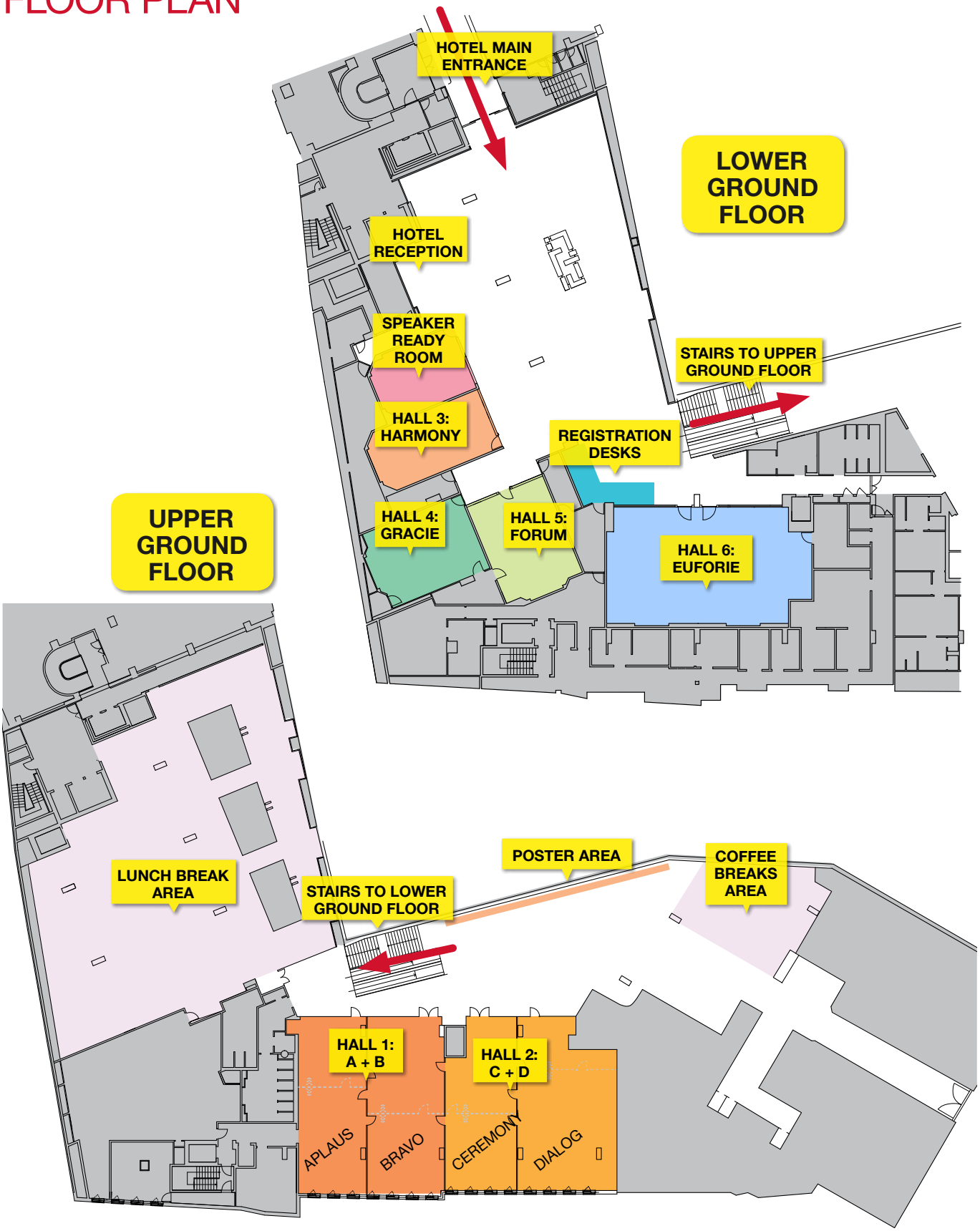
A JOINT COLLABORATION WITH

hbsc HEALTH BEHAVIOUR IN SCHOOL-AGED CHILDREN

WHO Collaborating Centre for International Child & Adolescent Health Policy

AdvanceHE

VENUE FLOOR PLAN



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11th Excellence in Pediatrics Conference

SAVE THE DATE
5-7 December 2019

Dedicated to Facilitating Education Across Pediatric Specialties

Visit: https://eip-pediatrics-conference.ineip.org/

WELCOME FROM THE 2018 CONFERENCE CHAIRS

SIR TERENCE STEPHENSON
Chair of the General Medical Council (GMC) in the UK and Nuffield Professor of Child Health at the Institute of Child Health at University College London, UK

JOAN-CARLES SURIS
Institute of Social and Preventive Medicine and Department of Pediatrics Lausanne University Hospital, Switzerland

JO INCHLEY
HBSC International Coordinator, University of St Andrews, School of Medicine, UK

Dear Colleagues and Friends,

Welcome to the 10th Edition of the Annual Excellence in Pediatrics (EiP) Conference and thank you for joining us in celebrating 10 years of EIP.

That's a decade of sharing the latest practical developments in pediatrics and over the past 10 years over 400 expert speakers have delivered 850+ sessions, workshops and updates, to a collective audience of 13,000+ attendees. From Florence to London, Istanbul to Madrid, Doha to Dubai, back to London, and then on to Vienna, we are very thankful that you have joined us on this exciting journey and are honored that you are here with us in the beautiful and inspiring city of Prague for the 10th Edition of EIP.

As ever, please make the most of your time at the conference, and in the city of Prague, over the next 3 days and take every opportunity to connect with the Conference Faculty, and your fellow delegates from 90+ countries around the world.

Over the past 10 years it's collaboration that has helped EIP go from strength-to-strength and this year is certainly no different. EIP 2018 is once again a truly collaborative effort held in conjunction with the Health Behaviour in School-aged Children (HBSC): WHO Collaborative Study, the WHO Collaborating Centre for International Child and Adolescent Health Policy based at the University of St Andrews School of Medicine, Advance HE, and a host of other partners and supporters. We are very grateful to all our partners for their help and support in creating such an inspiring and practical conference programme.

In addition to the main conference, with its new sub-specialty track structure, it's great to see that 160+ abstracts have been accepted. Selected oral presentations are, for the first time, included on each track and integrated with the other conference sessions. We believe that new research is critical for improving standards of care and we would encourage you to attend the oral presentations, as well as view the posters located outside Halls A,B.C,D on the Upper Ground Floor. There are 4 organised poster walks from 13:00-14:00 on Thursday and Friday and you are welcome to join. As well as being included in this onsite brochure, all accepted abstracts have been published by *Cogent Medicine* online as the final, definitive and citable version of the book of abstracts.

Finally, in parallel to the main conference sessions and oral presentations, EiP are delighted to be hosting the 3rd Life Course Immunisation Focus Group Meeting on Friday 7th December from 10:00-14:00 in Hall Euforia on the Lower Ground Floor. This is an open meeting tasked with overcoming vaccine hesitancy across Europe and we would encourage you to join and attend. The full Focus Group agenda is available on pages 56-57.

Thank you for attending the 10th Annual EIP meeting and we hope that you enjoy all that is on offer and look forward to meeting and working with you over the coming 3 days and continuing to collaborate with you into 2019 and beyond.

EDUCATIONAL HIGHLIGHTS OF THE 2018 CONFERENCE

Dear Conference Delegates,

It gives me great pleasure to introduce the scientific program for the 10th Edition of the Excellence in Pediatrics Conference taking place in Prague from 6-8 December, 2018.

As you will see, the 2018 program has been designed to offer a deeper understanding of the very latest developments in the main pediatric subspecialties, while highlighting each session's relevance to the general practitioner, their day-to-day work, demands and educational needs.

The program covers the very latest hot topics and developments across 10 specialties of pediatrics, making use of 5 different session types on each track. From Dermatology to Gastroenterology, Respiratory to Adolescent Medicine, Nephrology to Neurology, Nutrition to Rheumatology, Endocrinology to General Pediatrics, there's a track and session for everyone.

The types of sessions included this year include a dynamic mix that puts interaction, both between speakers and delegates, at the heart of its design. From Advances and Updates sessions to Therapeutic Management, How to.. Workshops to Case Studies Panels there's a host of sessions that promote audience interaction and group learning.

The program can be viewed as 10 sub-specialty conferences all in on place and is design to allow you to pick and choose the most relevant sections and sessions to create your very own personalised conference agenda from over 90 hours of conference content across 5 parallel tracks on each day. You can choose to stick with a specialty for the full day (although you will have to change halls) or can select by section, and even individual presentation, and are free to move as and when you wish.

To help you choose the right session for your needs, each session has a clear set of 3 learning objectives that are detailed in the full version of the program on pages XX-XX. These objectives will allow you to have a much better understanding of what you will get from each session. In addition, you will be asked to evaluate each session through delegate evaluation cards that will help EiP to constantly improve the quality of the sessions and build and improve the conference next year.

I would encourage you to actively participate and interact with the global expert speakers and the many hundreds of your fellow delegates from around the world. Please make the most of what promises to be our most diverse scientific programme to-date that combines applied medicine and interactive learning to improve the way you practice.

G. Syrogiannopoulos
2018 Scientific Program Coordinator
Professor and Chairman of Pediatrics at the School of Medicine, University of Thessaly

■ 90+ scientific sessions across 5 parallel tracks (each focusing on a pediatric sub-specialty) in an inspiring mix of interactive formats and workshop learnings, allowing you to tailor-make the conference to your needs.

■ Presentations from over 75+ internationally renowned speakers, leading experts in pediatrics, adolescent health, leadership and professional development.

■ Over 160 accepted abstracts, 70 poster displays and 12 hours of new science and research in oral presentations sections included in the main conference programme

Continuing Pediatric Education Throughout the Year

Access the Latest Live and Recorded EIP Online Courses

A Wealth of Knowledge at Your Fingertips

Visit: eip-pediatrics-community.ineip.org

DAY 1

	A+B	C+D	Euforia
08:00-09:00	Coffee Start and Registration		
	Morning Sessions		
09:00-09:30 09:30-10:00 10:00-10:30 10:30-11:00	**PEDIATRIC DERMATOLOGY** **Advances and Updates** 2 hours / Hall: A+B	**PEDIATRIC GASTROENTEROLOGY** **Advances and Updates** 2 hours / Hall: C+D	**ADOLESCENT MEDICINE** **Advances and Updates** 2 hours / Hall: Euforia
	Noon Sessions		
11:00-11:30 11:30-12:00 12:00-12:30 12:30-13:00	**PEDIATRIC GASTROENTEROLOGY** **Therapeutic Management** 2 hours / Hall: A+B	**PEDIATRIC RHEUMATOLOGY** **Advances and Updates** 2 hours / Hall: C+D **PEDIATRIC RHEUMATOLOGY** **Oral Presentations** 30 minutes / Hall: C+D	**PEDIATRIC NEUROLOGY** **Advances and Updates** 2 hours / Hall: Euforia
13:00-14:00	Poster Session		
	Lunch Break		
	Afternoon Sessions		
14:00-14:30 14:30-15:00 15:00-15:30 15:30-16:00	**PEDIATRIC DERMATOLOGY** **Therapeutic Management** 2.5 hours / Hall: A+B	**PEDIATRIC NEPHROLOGY** **Briefings** 2 hours / Hall: C+D	**PEDIATRIC NEUROLOGY** **Therapeutic Management** 2 hours / Hall: Euforia
16:00:16:30		**PEDIATRIC RHEUMATOLOGY** **Advances and Updates** 30 minutes / Hall: C+D	**PEDIATRIC NEUROLOGY** **Oral Presentations Part 2** 30 minutes / Hall: Euforia
16:30-17:00	Coffee Break		
17:00-18:30	Opening Plenaries		
18:30-19:15	Welcome Reception & Close of Day 1		

Harmonie	Gracie	Forum	
	DAY 1		
Coffee Start and Registration			08:00-09:00
	Morning Sessions		
PEDIATRIC NEPHROLOGY **Advances and Updates** 45 minutes / Hall: Harmonie	**PEDIATRIC NEUROLOGY** **Oral Presentations Part 1** 2 hour / Hall: Gracie		09:00-09:30 09:30-10:00
GENERAL PEDIATRICS **Oral Presentations Part 1** 1 hour 15 minutes / Hall: Harmonie			10:00-10:30 10:30-11:00
	Noon Sessions		
ADOLESCENT MEDICINE **Adolescent Sexual Health** 2 hours / Hall: Harmonie	**PEDIATRIC DERMATOLOGY** **Masterclass** 2 hours / Hall: Gracie	**GENERAL PEDIATRICS** **Oral Presentations Part 2** 2 hours / Hall: Forum	11:00-11:30 11:30-12:00 12:00-12:30 12:30-13:00
Poster Session			13:00-14:00
Lunch Break			
	Afternoon Sessions		
PEDIATRIC GASTROENTEROLOGY Masterclass 2 hours / Hall: Harmonie	**ADOLESCENT MEDICINE** **Advances and Updates** 1 hour / Hall: Gracie		14:00-14:30 14:30-15:00 15:00-15:30 15:30-16:00
PEDIATRIC GASTROENTEROLOGY **Oral Presentations** 30 minutes / Hall: Harmonie	**ADOLESCENT MEDICINE** **Adolescent Transition Workshop** 1.5 hours / Hall: Gracie		16:00:16:30
Coffee Break			16:30-17:00
			17:00-18:30
Welcome Reception & Close of Day 1			18:30-19:15

DAY 2

08:00-09:00	Coffee Start		
	Morning Sessions		
09:00-09:30 09:30-10:00 10:00-10:30 10:30-11:00	**PEDIATRIC ENDOCRINOLOGY** **Advances and Updates** 2 hours / Hall: A+B	**NUTRITION** **Advances and Updates** 2 hours / Hall: C+D	
	Noon Sessions		
11:00-11:30 11:30-12:00 12:00-12:30 12:30-13:00	**PEDIATRIC ENDOCRINOLOGY** **Therapeutic Management** Case Studies 2 hours / Hall: A+B	**PEDIATRIC RESPIRATORY** **Advances and Updates** 2 hours / Hall: C+D	**3rd FOCUS GROUP MEETING ON VACCINATIONS** **4 hours / Hall: Euforia**
	Poster Session		
13:00-14:00	Lunch Break		
	Afternoon Sessions		
14:00-14:30 14:30-15:00 15:00-15:30 15:30-16:00	**INFECTIOUS DISEASES** **Advances and Updates** 2 hours / Hall: A+B	**PEDIATRIC ENDOCRINOLOGY** **Advances and Updates** 2 hours / Hall: C+D	**PEDIATRIC RESPIRATORY** **Masterclass** 1.5 hours / Hall: Euforia
16:00-16:30	Coffee Break		
16:30-17:00 17:00-17:30 17:30-18:00 18:00-18:30	**INFECTIOUS DISEASES** **Advances and Updates** 2 hour / Hall: A+B	**PEDIATRIC RESPIRATORY** **Advances and Updates** 1 hour / Hall: C+D **PEDIATRIC RESPIRATORY** **Oral Presentations** 1 hour / Hall: C+D	**PROFESSIONAL DEVELOPMENT** **Workshop 6** 2 hours / Hall: Euforia
18:30	Close of Day 2		

DAY 3

09:00 -09:30	Coffee Start	
	Morning Sessions	
09:30-10:00 10:00-10:30 10:30-11:00 10:30-11:30	**PRACTICAL ADVICE HOW TO DETECT EARLY, DIAGNOSE AND REFER PATIENTS WITH SERIOUS CONDITIONS** 2 hours / Hall: A+B+C	
11:30-12:30	Closing Plenary	
12:30	Close of Conference	

DAY 2

Coffee Start			08:00-09:00
Morning Sessions			
INFECTIOUS DISEASES **Masterclass** 2 hours / Hall: Harmonie	**PROFESSIONAL DEVELOPMENT** **Workshop 1** 2 hours / Hall: Gracie	**PEDIATRIC RESPIRATORY** **Masterclass** 2 hours / Hall: Forum	09:00-09:30 09:30-10:00 10:00-10:30 10:30-11:00
Noon Sessions			
NUTRITION **Masterclass** 2 hours / Hall: Harmonie	**PROFESSIONAL DEVELOPMENT** **Workshop 2** 1 hour / Hall: Gracie **PROFESSIONAL DEVELOPMENT** **Workshop 3** 1 hour / Hall: Gracie	**INFECTIOUS DISEASES** **Oral Presentations** 2 hours / Hall: Forum	11:00-11:30 11:30-12:00 12:00-12:30 12:30-13:00
Poster Session			
Lunch Break			13:00-14:00
Afternoon Sessions			
ADOLESCENT MEDICINE **Advances and Updates** 2 hours / Hall: Harmonie	**PROFESSIONAL DEVELOPMENT** **Workshop 4** 1 hour / Hall: Gracie **PROFESSIONAL DEVELOPMENT** **Workshop 5** 1 hour / Hall: Gracie	**NUTRITION** **Interactive Briefing** 1 hour / Hall: Forum **NUTRITION** **Oral Presentations** 1 hour / Hall: Forum	14:00-14:30 14:30-15:00 15:00-15:30 15:30-16:00
Coffee Break			16:00-16:30
ADOLESCENT MEDICINE **Oral Presentations** 2 hour / Hall: Harmonie	**NUTRITION** **How to... Sessions** 1 hour / Hall: Gracie **GENERAL PEDIATRICS** **How to... Sessions** 1 hour / Hall: Gracie	**PEDIATRIC ENDOCRINOLOGY** Oral Presentations 2 hours / Hall: Forum	16:30-17:00 17:00-17:30 17:30-18:00 18:00-18:30
Close of Day 2			18:30

DAY 3

Coffee Start			09:00 -09:30
Morning Sessions			
ADOLESCENT MEDICINE **Masterclass** 2 hours / Hall: Harmonie	**PROFESSIONAL DEVELOPMENT** **Workshop 7** 2 hours / Hall: Gracie	**NEONATOLOGY** **Oral Presentations** 2 hours / Hall: Forum	09:30-10:00 10:00-10:30 10:30-11:00 10:30-11:30
			11:30-12:30
			12:30

DAY 1: Thursday 6 December 2018

09:00-11:00 MORNING SESSIONS

DERMATOLOGY

ADVANCES AND UPDATES
2 hours / Hall: A+B

Moderators: DIRK VAN GYSEL & BARBARA KUNZ

Exanthems - Old and New
DIRK VAN GYSEL, Belgium

Genital Skin Conditions in Pediatric Dermatology
MARIO CUTRONE, Italy

Atopic Dermatitis - How to Improve Compliance
SHERIEF JANMOHAMED, Belgium

RHEUMATOLOGY & NEPHROLOGY

ADVANCES AND UPDATES
45 minutes / Hall: Harmonie

Moderator: TERENCE STEPHENSON

Hypertension in Children
TOMAS SEEMAN, Czech Republic

GENERAL PEDIATRICS ORAL PRESENTATIONS - PART 1
1 hour 15 minutes / Hall: Harmonie

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GASTROENTEROLOGY

ADVANCES AND UPDATES
2 hours / Hall: C+D

Moderator: MARK BEATTIE

Advances in the Management of Intestinal Failure
AKSHAY BATRA, UK

Probiotics and GI Diseases
AZIZ KOLEILAT, Lebanon

Allergic Gastrointestinal Disease
LEANNE GOH, UK

11:00-13:00 NOON SESSIONS

DERMATOLOGY

MASTERCLASS
2 hours / Hall: Gracie

Skin Lesions in Neonates - Skin, Hair and Nails - PART 1

Skin Conditions in Infants and Children - Skin, Hair and Nails - PART 2
DIRK VAN GYSEL, Belgium
BARBARA KUNZ, Germany

RHEUMATOLOGY & NEPHROLOGY

ADVANCES AND UPDATES
2 hours / Hall: C+D

Moderator: SYLVIA KAMPHUIS

Clinical Presentations and Diagnosis of Juvenile Idiopathic Arthritis
PAVLA DOLEZALOVA, Czech Republic

Systemic Autoimmune Disease: What the Paediatrician Needs to Know
SYLVIA KAMPHUIS, Netherlands

Juvenile Idiopathic Arthritis (JIA) - Therapeutic Strategies
PAVLA DOLEZALOVA, Czech Republic

ORAL PRESENTATIONS
30 minutes / Hall: C&D

Moderator: SYLVIA KAMPHUIS

Abstract
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GASTROENTEROLOGY

THERAPEUTIC MANAGEMENT
2 hours / Hall: A+B

Moderator: TERENCE STEPHENSON

Constipation in Childhood. Clinical Features, Diagnosis and Management
MARK BEATTIE, UK

Early Diagnosis of Coeliac Disease - Pathways for Diagnosis of Coeliac Disease in Children
AKSHAY BATRA, UK

Intestinal Failures - Case Studies Panel:
MARK BEATTIE (Chair), RAFEEQ MUHAMMED, AKSHAY BATRA

Gastro-oesophageal Reflux: When to Investigate? How to Treat?
YVAN VANDENPLAS, Belgium

DAY 1: Thursday 6 December 2018

NEUROLOGY

ORAL PRESENTATIONS - PART 1
2 hour / Hall: Gracie

Moderator: PHIL FISCHER

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ADVANCES AND UPDATES
2 hours / Hall: Euforia

Moderator: CHARLOTTE HAAXMA

Neuromuscular Disorders
RICHARD FINKEL, USA

Orthostatic Intolerance - Diagnosis, Management and Communication with Patients
PHIL FISCHER, USA

How to Understand and Diagnose Paediatric Movement Disorders
CHARLOTTE HAAXMA, Netherlands

ADOLESCENT MEDICINE

ADVANCES AND UPDATES
2 hours / Hall: Euforia

Moderator: JO INCHLEY

Gendered Approaches to Adolescent Health Promotion and Healthcare
ALINA COSMA, The Netherlands

Transgender Youth/Gender Dysphoria
LAURA CHARLTON, UK

Adolescent Peer Violence: Forms, Determinants and Outcomes
SOPHIE WALSH, Israel

Adolescent Mental Heath & Wellbeing Update
FIONA BROOKS, UK

ADOLESCENT SEXUAL HEALTH
2 hours / Hall: Harmonie

Moderator: FIONA BROOKS

Last and First Intercourse, What Can 15-year-old High School Students Tell Us? Evidence from the Health Behaviour in School-aged Children (HBSC) Study
EMMANUELLE GODEAU, France

A Persistent Inequality in Gender and Sexual Minority Adolescents' Health: Evidence from the Health Behaviour in School-aged Children (HBSC) Study
ANDRAS KOLTO, Ireland

Sexting: What is It and How to Deal with It
YARA BARRENSE-DIAS, Switzerland

NOON SESSIONS

GENERAL PEDIATRICS ORAL PRESENTATIONS - PART 2
2 hours / Hall: Forum

Moderator: JOAN-CARLES SURIS

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DAY 1: Thursday 6 December 2018

DERMATOLOGY	RHEUMATOLOGY & NEPHROLOGY	GASTROENTEROLOGY

13:00-14:00 Lunch

13:00-14:00 Poster Viewings - Lunchtime Viewing Groups & Guided Tours - Outside Halls A+B+C+D
See details on page 21

14:00-16:30 AFTERNOON SESSIONS

THERAPEUTIC MANAGEMENT
2.5 hours / Hall: A+B

Moderators: DIRK VAN GYSEL & BARBARA KUNZ

Common Skin Infections
MARIANNE MORREN, Switzerland

Advances in the Management of Acne
JULIE LEYSEN, Belgium

Management of Nevi
MARC LACOUR, Switzerland

Instructive Cases Panel
All Track Speakers

NEPHROLOGY BRIEFINGS
2 hours / Hall: C+D

Treatment of Systemic Lupus Erythematosus (SLE)

Nephrotic Syndrome

Urinary Tract Infections in Children
KJELL TULLUS, UK

RHEUMATOLOGY ADVANCES AND UPDATES
30 minutes / Hall: C+D

Children with Recurrent Fever: Autoinflammatory Diseases: Where We Are Today?
JORDI ANTON, Spain

MASTERCLASS
2 hours / Hall: Harmonie

Inflammatory Bowel Disease: Epidemiology, Diagnosis and Management
MARK BEATTIE, UK
RAFEEQ MUHAMMED, UK

ORAL PRESENTATIONS
30 minutes / Hall: Harmonie

Moderator: MARK BEATTIE

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16:30-17:00 Coffee Break

17:00-18:30 OPENING: KEYNOTE PLENARY SESSIONS - Welcome from the Co-Chairs
1.5 hours / Hall: A+B+C+D

The Paediatrician of the Future
TERENCE STEPHENSON, UK

Why is Adolescent Health Important?
JOAN-CARLES SURIS, Switzerland

Adolescent Alcohol Use: What Do We Know and What Can We Do?
JO INCHLEY, UK

18:30-19:00 Welcome Reception

DAY 1: Thursday 6 December 2018

NEUROLOGY	ADOLESCENT MEDICINE

Moderators: JOAN-CARLES SURIS, CHRISTINA AKRE, RICHARD BELANGER & YARA BARRENSE-DIAS.

THERAPEUTIC MANAGEMENT
2 hours / Hall: Euforia

Moderator: RICHARD FINKEL

Reviewing Treatment Options for Paediatric Movement Disorders
CHARLOTTE HAAXMA, Netherlands

Dravet Syndrome: Early Diagnosis - Treatment and Management from the Diagnosis to Adulthood
CHARLOTTE DRAVET, Italy

Understanding and Managing Functional Neurologic Disorders in Adolescents
PHIL FISCHER, USA

ORAL PRESENTATIONS - PART 2
30 minutes / Hall: Euforia

Moderator: RICHARD FINKEL

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ADVANCES AND UPDATES
1 hour / Hall: Gracie

Moderator: JOAN-CARLES SURIS

How to Address Cannabis Use with Teenagers and Their Parents – Tackling Myths and Exploring Adverse Impacts
RICHARD BELANGER, Canada

Adolescent Obesity and Related Health Behaviours
JELENA GUDELJ RAKIC, Serbia

ADOLESCENT TRANSITION WORKSHOP
1.5 hours / Hall: Gracie

Why Reinvent the Wheel? A Starting Point to Create a Transition Program
JOAN-CARLES SURIS, Switzerland
CHRISTINA AKRE, Switzerland

DAY 2: Friday 7 December 2018

09:00-11:00 MORNING SESSIONS

ENDOCRINOLOGY & GROWTH

ADVANCES AND UPDATES
2 hours / Hall: A+B

Moderator: ALAN. D. ROGOL

Congenital Hypothyroidism - Screening and Management
TIM CHEETHAM, UK

The Latest Advances in Technologies for the Management of Diabetes in Children and Adolescents
REVITAL NIMRI, Israel

New Treatments for Congenital Adrenal Hyperplasia and Adrenal Failure
NILS P KRONE, UK

INFECTIOUS DISEASES

MASTERCLASS
2 hours / Hall: Harmonie

Tropical Infectious Diseases 2018 - Malaria, arboviruses, Ebola and co-infections
AUBREY CUNNINGTON, UK

NUTRITION

ADVANCES AND UPDATES
2 hours / Hall: C+D

Moderator: MARK BEATTIE

Human Milk Oligosaccharides
YVAN VANDENPLAS, Belgium

Iron Deficiency in Children: Diagnosis, Neurological Impacts and Treatment
COLIN MICHIE, UK

Milk Fat Globule Membrane (MFGM) and the Neonatal Gut Microbiome and Intestinal Development
ROY PHILIP, Ireland

11:00-13:00 NOON SESSIONS

ENDOCRINOLOGY & GROWTH

THERAPEUTIC MANAGEMENT & CASE STUDIES
2 hours / Hall: A+B

Moderators: TIM CHEETHAM & ALAN. D. ROGOL

Long-acting Growth Hormone. What to Know and How to Support the Specialist as a Member of the Care Team
ALAN. D. ROGOL, USA

Bone Disease in Children – When to Use and When not to use Bisphophanates
NICK SHAW, UK

INTERACTIVE CASE STUDIES

Growth Curves and their Interpretation

Short Stature Panel:
ALAN. D. ROGOL, TIM CHEETHAM, NILS P KRONE, NICK SHAW

INFECTIOUS DISEASES

ORAL PRESENTATIONS
2 hours / Hall: Forum

Moderator: AUBREY CUNNINGTON

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NUTRITION

MASTERCLASS
2 hours / Hall: Harmonie

Nutrition and Management of Allergies from Infancy to Childhood
LEANNE GOH, UK
PENNY SALT, UK
SOPHIA KALLIS, UK

13:00-14:00 Lunch

13:00-14:00 Poster Viewings - Lunchtime Viewing Groups & Guided Tours - Outside Halls A+B+C+D

See details on page 21

DAY 2: Friday 7 December 2018

RESPIRATORY

MASTERCLASS
2 hours / Hall: Forum

Allergy Management
ADNAN CUSTOVIC, UK
PAUL TURNER, UK

ADVANCES AND UPDATES
2 hours / Hall: C+D

Moderators: CLAIRE HOGG & ANDREW BUSH

Personalised Therapies for Cystic Fibrosis: Treating the Basic Defect
RISHI PABARY, UK

The Myth of the Allergic March
ADNAN CUSTOVIC, UK

Primary Ciliary Dyskinesia (PCD) - When to Suspect, How to Diagnose, Recent Advances
CLAIRE HOGG, UK

Peanut Allergy - No Longer a Life Sentence
PAUL TURNER, UK

PROFESSIONAL DEVELOPMENT

WORKSHOP 1
2 hours / Hall: Gracie

Leadership - Part 1 - Leadership and Team Development
DOUG PARKIN, UK

WORKSHOP 2
1 hour / Hall: Gracie

Publishing Advice for Healthcare Professionals - Getting Research Published
MARK BEATTIE, UK

WORKSHOP 3
1 hour / Hall: Gracie

Social Media: Knowledge Translation in the 21st Century
DAMIAN ROLAND, UK

Moderators: JOAN-CARLES SURIS, CHRISTINA AKRE, RICHARD BELANGER & YARA BARRENSE-DIAS.

POLICY MEETINGS

MEETING ON VACCINATIONS
4 hours / Hall: Euforia - 10:00 -14:00

Co-Chairs:
TERENCE STEPHENSON, UK
DAPHNE HOLT, France
DAVID SALISBURY, UK

3rd LifeCourse Immunisation Focus Group Meeting

DAY 2: Friday 7 December 2018

14:00-16:00 EARLY AFTERNOON SESSIONS

ENDOCRINOLOGY & GROWTH

ADVANCES AND UPDATES
2 hours / Hall: C+D

Moderator: NICK SHAW

Turner Syndrome - Through the Ages to Adulthood
ALAN. D. ROGOL, USA

Suspected Endocrine Disease – When to Test and When not to Test
TIM CHEETHAM, UK

INFECTIOUS DISEASES

ADVANCES AND UPDATES
2 hours / Hall: A+B

Moderator: JETHRO HERBERG

Sepsis in 2018 – Theory vs. Practice
NELLY NINIS, UK

Meningococcal Disease in 2018
SIMON KROLL, UK

Pneumococcal Conjugate Vaccines Update
GEORGE SYROGIANNOPOULOS, Greece

Infectious Diseases, Decision Making in Acute Paediatrics
DAMIAN ROLAND, UK

NUTRITION

INTERACTIVE BRIEFING
1 hour / Hall: Forum

Moderator: MARK BEATTIE

Nutrition in Inflammatory Bowel Disease
MARK BEATTIE, UK

ORAL PRESENTATIONS
1 hour / Hall: Forum

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16:00-16:30 Coffee Break

16:30-18:30 AFTERNOON SESSIONS

ENDOCRINOLOGY & GROWTH

ORAL PRESENTATIONS
2 hours / Hall: Forum

Moderator: ALAN. D. ROGOL

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INFECTIOUS DISEASES

ADVANCES AND UPDATES
2 hour / Hall: A+B

Moderator: SIMON KROLL

The Diagnosis and Management of the Encephalitic Child

Kawasaki Disease
JETHRO HERBERG, UK

The Future in the Prevention of Respiratory Syncytial Virus (RSV) Infections in Children
CATHERINE WEIL-OLIVIER, France

Vaccine Hesitancy: A Growing Concern and the Power of the Patient Voice
CATHERINE WEIL-OLIVIER, France
ELENA MOYA, Spain

NUTRITION

HOW TO... SESSIONS
1 hour / Hall: Gracie

How to Help your Patient Manage Anaphylaxis

How to Help your Patient Manage Eczema
LEANNE GOH, UK
PENNY SALT, UK

HOW TO... SESSIONS
1 hour / Hall: Gracie

The Preparticipation Physical Exam

Common Face and Eye Injuries
ROBERT SALLIS, USA

18:30 END OF DAY

DAY 2: Friday 7 December 2018

RESPIRATORY

MASTERCLASS
1.5 hours / Hall: Euforia - 14:30

Acute Respiratory Distress in Children - Differential Diagnosis and Therapeutic Management
ROLAND HENTSCHEL, Germany
TORSTEN UHLIG, Germany

ADVANCES AND UPDATES
1 hour / Hall: C+D

Moderator: RISHI PABARY

Exercise Induced Asthma; A Practical Approach to Diagnosis and Treatment
ROBERT SALLIS, USA

Rising Cost of New Medicines - What are the Ethics?
ANDREW BUSH, UK

ORAL PRESENTATIONS
1 hour / Hall: C+D

Moderator: RISHI PABARY

Abstract
ID: 119
ID: 247
ID: 141
ID: 196
ID: 279
ID: 293
ID: 136

PROFESSIONAL DEVELOPMENT

WORKSHOP 4
1 hour / Hall: Gracie

How to write your CV, Grant Applications and Papers
ANDREW BUSH, UK

WORKSHOP 5
1 hour / Hall: Gracie

Interactive Workshop: Everything possible MUST BE DONE for my child – When Professionals and Carers Disagree
ANDREW BUSH, UK

WORKSHOP 6
2 hours / Hall: Euforia

Presentation Skills for Healthcare Professionals Workshop
DOUG PARKIN, UK

EARLY AFTERNOON SESSIONS

ADOLESCENT MEDICINE

ADVANCES AND UPDATES
2 hours / Hall: Harmonie

Moderator: JO INCHLEY

Healthy Adolescence: Promoting Physical Activity and Positive Health Outcomes During the Adolescent Years
JO INCHLEY, UK
ZDENEK HAMRIK, Czech Republic
PETR BADURA, Czech Republic
MICHAL KALMAN, Czech Republic

AFTERNOON SESSIONS

SELECTED ORAL PRESENTATIONS ADOLESCENT MEDICINE
2 hour / Hall: Harmonie

Moderator: JOAN-CARLES SURIS

Abstract
ID: 148
ID: 262
ID: 276
ID: 241
ID: 254
ID: 280
ID: 238
ID: 240

DAY 3: Saturday 8 December 2018

SPOT THE EARLY SIGNS	ADOLESCENT MEDICINE

09:30-11:30 MORNING SESSIONS

PRACTICAL ADVICE HOW TO DETECT EARLY, DIAGNOSE AND REFER PATIENTS WITH SERIOUS CONDITIONS
2 hours / Hall: A+B+C

Moderator: JOAN-CARLES SURIS

Spotting the Signs of the Non-inflammatory Causes of Joint Swelling - What the Paediatrician and Paediatric Rheumatologist Need to Look for.
ROLANDO CIMAZ, Italy

Spotting the Early Signs: Osteogenesis Imperfecta (OI) in Children - Reasons, Diagnostics and Treatment Available
NATALIA BELOVA, Russia

When Symptoms Indicate a Possible Endocrine Condition. Does Every Short Child Require a Proper Sub-Specialist Referral?
ALAN. D. ROGOL, USA

MASTERCLASS
2 hours / Hall: Harmonie

Skilful Communication with Adolescents and their Families
ANNE MEYNARD, Switzerland
ANNA SONKIN, Russia

11:30-12:30 CLOSING PLENARY SESSION
1 hour / Hall: A+B+C

Arboviruses - The latest on Dengue, Chikungunya and Zika - What the Paediatrcian Needs to Know...
COLIN MICHIE, UK

Closing Comments
JOAN-CARLES SURIS, Switzerland

DAY 3: Saturday 8 December 2018

ORAL PRESENTATIONS	PROFESSIONAL DEVELOPMENT
ORAL PRESENTATIONS NEONATOLOGY 2 hours / Hall: Forum	**WORKSHOP 7** 2 hours / Hall: Gracie
Moderator: ROY PHILIP	
Abstract **ID: 151** **ID: 236** **ID: 156** **ID: 134** **ID: 150** **ID: 231** **ID: 161** **ID: 233** **ID: 205**	**Leadership - Part 2 - Leading Change in a Complex Environment** DOUG PARKIN, UK

CONFERENCE GENERAL INFORMATION

Official Language

The official language of the Conference is English.

Badges & Conference Material

Name Badges and Conference Material will be provided on-site to all registered delegates at the Conference Registration Desks, from 06 December to 08 December. Badges are to be worn at all times, for reasons of security and identification. You will not be permitted to enter any room without your badge.

Abstracts book part of the final programme

All accepted contributions for the 10th Excellence in Pediatrics Conference are included in the printed Final Conference Program in the Abstracts section. Abstract Book will be published by *Cogent Medicine* and made available on the *Cogent Medicine* website as well as on the EIP Conference website. *Cogent Medicine* is a multidisciplinary open access journal, publishing experimental, translational & clinical approaches in all areas of the biomedical sciences and clinical research and practice. The journal is the official publishing partner of EIP.

Certificate of Attendance

All registered delegates are entitled to a Certificate of Attendance. Certificates can be collected from the Conference Secretariat. The certificates will be provided on site upon completion of a Conference feedback form.

Programme Changes

Due to circumstances beyond the control of the Conference Organisers, last minute changes to the programme may be unavoidable. All information included in this programme is accurate as at the day of printing, 15 November 2018.

INFORMATION FOR SPEAKERS

Speaker Ready Room

The Speakers' Ready Room (SRR) is the Idea and is located on the Lower Ground Floor. It will be operating from 20:00 - 21:30 on the 5th December, from 08:00 to 18:00 on the 6th December and 7th December. The Speakers' Ready Room will not be operating on the 8th December and speakers presenting on the 8th should either upload their presentation in the SRR on the 6th or 7th or bring it to the room they are presenting in on the 8th.

Speakers are kindly requested to hand in their presentation (USB-key, CD-ROM, DVD) at least two (2) hours before their scheduled presentation time. If your presentation is scheduled early in the morning, you are kindly requested to hand in your presentation at the Speakers' Ready Room the day before. All versions of MS PowerPoint are accepted, including Mac. If you are using embedded video clips in your presentation, please remember to submit video files separately. The following audiovisual equipment will be available for all presenters:

- PC
- Data video projector (PowerPoint presentations)
- Laser Pointer
- Microphones.

ORAL AND POSTER PRESENTERS

Oral Presentations

If you are presenting an oral podium presentation, you are kindly requested to observe the following points:

- You will be informed on the length of your presentation at a later stage depending on the session that your presentation will be allocated.
- Speakers are requested to hand in their presentation (USB-key) at least one (1) hour before their scheduled presentation time.
- All versions of MS PowerPoint are accepted, including Mac. If you are using embedded video clips in your presentation, please remember to submit video files separately. The following audiovisual equipment will be available for all presenters: PC, Data video projector (PowerPoint presentations), Laser Pointer, Microphones
- Please declare any conflicts of interest at the beginning of your presentation.
- Please speak slowly and clearly. English is the working language of the Conference, but not necessarily the native language of the delegates.

Poster Presentations

Two poster viewing sessions will be included in the conference program, one for each of the first two days of the conference.

1. If you are included in the 1st Poster Viewing Session, please post on the first day of the conference from 09.00 - 11.00 and remove / dismantle by the end of the day from 17.00 - 18.00
2. If you are included in the 2nd Poster Viewing Session, please post on the second day of the conference from 09.00 - 11.00 and remove / dismantle by the end of the day from 17.00 - 18.00

If you are presenting a poster, you are kindly requested to observe the following points:

1. English is the official language of the Conference.
2. Each presenting author should be present on the time and date of his/her presentation in the poster area.
3. You are expected to be standing in front of your poster for the duration of the poster session.
4. During the poster session, a moderator will lead Poster Walk Presentations around all of the posters at that session.
5. Poster Presenters are asked to be at their posters from 13:00-14:00 as Poster Walks will be conducted by the Faculty.
6. When the moderator visits your poster, you will be given 5 minutes to present the key points of your poster.

For Posters to be exhibited, please note the following:

1. The necessary material for displaying the posters will be available in the poster area.
2. Poster numbers will be displayed at the top of the panels.
3. The corresponding poster panel number for each poster presented has been provided by the Conference Organisers, along with abstract presentation guidelines.
4. Mounting and dismantling of posters will be done as specified in the information already sent to poster presenters by the Conference Organisers.
5. Please note that posters should be 150cm high x 120cm wide maximum (portrait layout).
6. As a courtesy to other presenters, participants are kindly requested not to move or remove poster numbers or change the order of the assigned poster boards.
7. It is essential that presenters clear their poster board promptly and within the scheduled time. Material left on a poster board after the removal deadline will be discarded.
8. The Conference Organisers are not responsible for materials left behind or for any stolen or damaged materials.

ATTENDEE SERVICES

All services are open daily and located at the **Secretariat area** in the entrance of the Venue.

Help at the Conference

AT THE SECRETARIAT: Please contact the organiser's staff at the registration area during these operating times:

- Thursday 6 December: 08:00 - 19:00
- Friday 7 December: 08:00 - 19:00
- Saturday 8 December: 08:00 - 13:00

IN PERSON: Find the friendly staff wearing the EIP's badge in the halls and the exhibition area or visit the desks in the registration area located on the Ground Floor.

BY EMAIL: Send an email to secretariat@ineip.org

In the event of an Emergency

For all emergencies at the Grandior Hotel Prague - fire, police and medical - contact the Conference Secretariat or any Co-ordinator of the Venue.

Liability & Insurance

Delegates are advised to arrange health and accident insurance before travelling to the Conference. The Conference Organisers cannot accept liability for personal injury or loss/ damage to property and belongings of delegates during the Conference or their stay in Prague. Please refrain from leaving your personal belongings unattended in any Conference area.

Mobile Phones

Delegates are kindly requested to switch off their mobile phones during the Conference sessions.

Internet Access

There is free Wi-Fi access in all areas of the Grandior Hotel Prague. Please log on to the Hotel's guest network.

Secretariat Operating Hours

The Secretariat registration desks will be open for the duration of the Conference, please note opening times below:

- Wednesday 5 December: 20:00 - 21:30
- Thursday 6 December: 08:00 - 19:00
- Friday 7 December: 08:00 - 19:00
- Saturday 8 December: 08:00 - 13:00

Photos, Video recordings

There will be an authorised photographer appointed by the Conference Organisers who will record all aspects of the event. These photographs will be uploaded on the social media pages of the EiP Institute daily during the Conference.

A number of Sessions will also be video recorded, which will be uploaded to the EiP Institute's website after the Conference and available for viewing both by those who could not attend the Conference and also those who attended and wish to review any Session.

There will also be opportunities to give interviews to the dedicated team at the Conference, in order to give your own testimonial of your Conference experience. Videos of these interviews will also be uploaded on EiP Institute's website and social media pages after the close of the Conference.

Social Media

Like Us: **https://www.facebook.com/EIPinstitute/**
Follow Us: **https://twitter.com/EIP_Institute**
Link with Us: **https://www.linkedin.com/groups/4440556**

Lunches, Coffee and Social Events

Offering a break from intensive learning during the programme Sessions, the coffee and lunch breaks also provide an excellent opportunity for meeting and networking with faculty members and peers from all over the world.

Lunch Breaks (in the Restaurant and the Conference Foyer on the Upper Ground Floor)**:**

Thursday 6 December, 13:00 - 14:00
Friday 7 December, 13:00 - 14:00

Coffee Starts and Coffee Breaks (in the Conference Foyer on the Upper Ground Floor)**:**

Thursday 6 December, 08:00 - 09:00
Thursday 6 December, 16:30 - 17:00
Friday 7 December, 08:00 - 09:00
Friday 7 December, 16:00 - 16:30
Saturday 8 December 08:30 - 09:30

Welcome Reception:

Thursday 7 December, 18:30 (in the Conference Foyer on the Upper Ground Floor)

ATTENDEE SERVICES

The Venue

Grandior Hotel Prague: Prague is truly the Heart of Europe, and standing guard above the hilly banks of the Vltava River, the Grandior lies in the centre of it all. Providing comfort and sophistication in a premier setting, this exceptional Prague Czech Republic hotel offers the ideal base from which to explore this historic city's shops, restaurants, and architectural treasures.

A conference at the Hotel Grandior is bound to be an unforgettable experience. Grandior Hotel Prague has unique versatile conference facility in the center of Prague. The conference center has 9 flexible meeting rooms.

Directions to the hotel

Arrival by train: From Hlavní Nádraží train station or Nádraží Holešovice train station: Take underground C (Red line) to Florenc station.

Arrival by public transport: Take bus No. 100 from the airport to the bus station Zličín where you change to the metro (underground) train and take the B line (yellow) from Zličín to Florenc station.

Arrival by own car and parking - secondary hotel entrance and garage entrance (50°8'97.358''N - 14°43'49.583''E). Street address: Na Florenci 29, 110 00 Prague 1, Czech Republic (address of the former Designhotel Elephant)

Visit the Venue's Website: https://www.hotel-grandior.cz/en/

DISCOVER PRAGUE

With it's beautiful architecture, rich cultural history and excellent gastronomy and shopping options, there is something for everyone in this gorgeous city on the Vltava River.

In winter, Prague is especially beautiful. Buildings covered with snow evoke a fairy-tale like atmosphere. Though the weather is chilly, visitors can warm up in pubs, cafes, galleries, museums or concert halls.

Winter is the best time to taste Czech cuisine. Dumplings, pork and cabbage or sirloin with cream sauce provide sufficient energy to explore all of the monuments. Do not forget to try some soup and something for your sweet tooth!

You may be surprised to hear it, but it really is possible to go skating or skiing right in the city. You don't even need your own equipment, some of the rinks (or trails) let you borrow it.

The Grandior Hotel Prague offers the ideal location for you to discover The City of One Hundred Spires. Many of the palaces in the local area have been restored to their former splendour, offering an authentic medieval glimpse into the past. Experience a sampling of the cultural, religious, and historical sites.

Some of the delights that Prague has to offer include:

Old Town Square - The oldest and most historically important of Prague's squares. It is surrounded by buildings of historical importance such as the Old Town City hall with the famous Astronomical Clock with it's twelve apostles.

Municipal House Symphony Hall - A national treasure hosting concerts, exhibitions, fashion shows and balls.

Kampa Park - Prague's finest dining establishment with stylish dining rooms and a riverside terrace (heated and covered in winter).

Josefov (The Old Jewish Quarter and Jewish Cemetery) - An area of huge

historical significance and also the birthplace of the celebrated writer Franz Kafka, who is commemorated with a statue on Dusni Street.

Charles Bridge - Charles Bridge is a stone Gothic bridge that connects the Old Town and Lesser Town (Malá Strana). It was actually called the Stone Bridge (Kamenný most) during its first several centuries. Its construction was commissioned by Czech king and Holy Roman Emperor Charles IV and began in 1357. In charge of the construction was architect Petr Parléř whose other works include the St. Vitus Cathedral at the Prague Castle. It is said that egg yolks were mixed into the mortar to strengthen the construction of the bridge.

Prague Castle - Prague Castle, founded around 880 AD, is the largest medieval castle in Europe and was once the seat of the Kings of Bohemia. Today, the President of the Czech Republic rules from the castle, and it is Prague's premier tourist attractions. The changing of the guard takes place daily at noon.

Lesser Town - Unlike Old Town, steep streets, stairways and beautiful palace gardens await you in Lesser Town in Prague. The diversity of the Baroque façades gives Lesser Town the atmosphere of a storybook setting, but it is also a residential neighbourhood, and home to the government and offices, embassies and foreign diplomats.

St. Nicholas Church - The Church of St Nicholas, the most famous Baroque church in Prague, stands along with the former Jesuit college in the centre of the Lesser Town Square.

Wallenstein Palace - (Valdštejnský palác)s a Baroque palace located in the Malá Strana area, close to Prague Castle. It is currently the home of the Czech Senate. Whilst in the area don't forget to visit the famous John Lennon wall, the wall that was formerly an ordinary wall in Prague has been called Lennon´s since the 1980s, when people have filled it with John Lennon-inspired graffiti and pieces of lyrics from Beatles songs. The Lennon Wall represented not only a memorial to John Lennon and his ideas for peace, but also a monument to free speech and the non-violent rebellion of Czech youth against the regime. It was a small war of Czech people against the communist police who cleaned the wall

Additional Information for visitors can be found on the below links:

Prague Official Tourism Office
https://www.prague.eu/en

Winter in Prague
http://www.prague.eu/en/winter

Practical and Travel Information Prague
http://www.prague.eu/en/practical

Christmas in Prague
https://www.prague.eu/en/christmas

SUPPORTING ORGANISATIONS

WHO Collaborating Centre for International Child & Adolescent Health Policy

University of St Andrews

hbsc HEALTH BEHAVIOUR IN SCHOOL-AGED CHILDREN WORLD HEALTH ORGANIZATION COLLABORATIVE CROSS-NATIONAL STUDY

The Health Behaviour in School-Aged Children (HBSC) network is an international alliance of researchers that collaborate on the WHO collaborative cross-national survey of school students, Health Behaviour in School-aged Children. Initiated in the early 1980's, the study collects data every four years on 11-, 13- and 15-year-old boys' and girls' health and well-being, social environments and health behaviours. The research venture dates back to 1982 and shortly thereafter it was adopted by the WHO Regional Office for Europe as a collaborative study. HBSC now includes 49 countries and regions across Europe and North America. This collaboration brings in individuals with a wide range of expertise in areas such as clinical medicine, epidemiology, biology, pediatrics, pedagogy, psychology, public health, public policy, and sociology. The study has therefore involved cross-fertilization of a range of perspectives that has resulted in an innovative scientific framework which captures the contextual environment in which young people live thus allowing us to gain an insight into determinants and possible mediators and moderators of young people's health. As such, HBSC has earned a reputation as a unique provider of key internationally comparable statistics on the health and health-related behaviours of young people. To increase its policy impact and knowledge exchange efforts, the study works closely with the WHO Collaborating Centre for International Child and Adolescent Health Policy (WHO CC) at the University of St Andrews School of Medicine. This prestigious appointment endorses the international research and policy-influencing work of the School's leading researchers in the field of population and behavioural health sciences. The WHO CC seeks to use research to inform policy and practice aimed at improving young people's health, well-being, health behaviours, and supportive social contexts. In this regard, the WHO CC works closely with key stakeholders to affect policy aimed at this age group throughout Europe and globally. This conference is the fourth of its kind to bring together the HBSC study, the Excellence in Pediatrics Institute, and the WHO CC to build knowledge, foster dialogue, and progress innovation in research and practice within the field of children and adolescent health.

The HBSC study provides secular trends across countries for a wide variety of key measures within adolescent health. Pediatricians are in a unique position to critically examine this data, contextualise it, and use it to support and promote healthy behaviours in the young people they care for. The WHO CC advocates on a number of adolescent health issues and policy recommendations aimed at national and international bodies. All in all, it will be an excellent opportunity to make research and data relevant to practitioners, as well as to better familiarise researchers with the challenges and opportunities of pediatric clinical practice. This event will provide a unique collaborative opportunity for cross-fertilisation and growth.

Advance HE

Advance HE is a not-for-profit organisation created from the merger of the Equality Challenge Unit, the Higher Education Academy and the Leadership Foundation for Higher Education in March 2018. Our purpose is to advance the professional practice of higher education to improve outcomes for the benefit of students, staff and society.

The Confederation of Meningitis Organisations (CoMO) is an international not-for-profit member organisation working to reduce the incidence and impact of meningitis and septicaemia worldwide. We bring together patient groups, health professionals, meningitis survivors and families from more than 30 countries to help prevent meningitis worldwide. Our **mission** is to support patient groups and individuals to raise awareness of meningitis and septicaemia through communication, advocacy and support. We operate at the global level to facilitate the development of the patient voice at a local level.

We connect our members and support them to share their experiences so that their communities have access to information on meningitis. World Meningitis Day, an international campaign that we coordinate, is an example of this; through telling patient stories, raising awareness of the signs and symptoms and increasing knowledge of available vaccines, we and our members are able to raise the global profile of meningitis and share potentially life-saving information with thousands of people worldwide.

We also hold international conferences and are a founding member of the Coalition for Life Course-Immunisation, an initiative which aims to increase awareness of vaccine inequalities and the need for immunisation at all ages

If you are interested in learning more about the work we do, please contact info@comomeningitis.org.

PUBLISHING PARTNER

cogent medicine

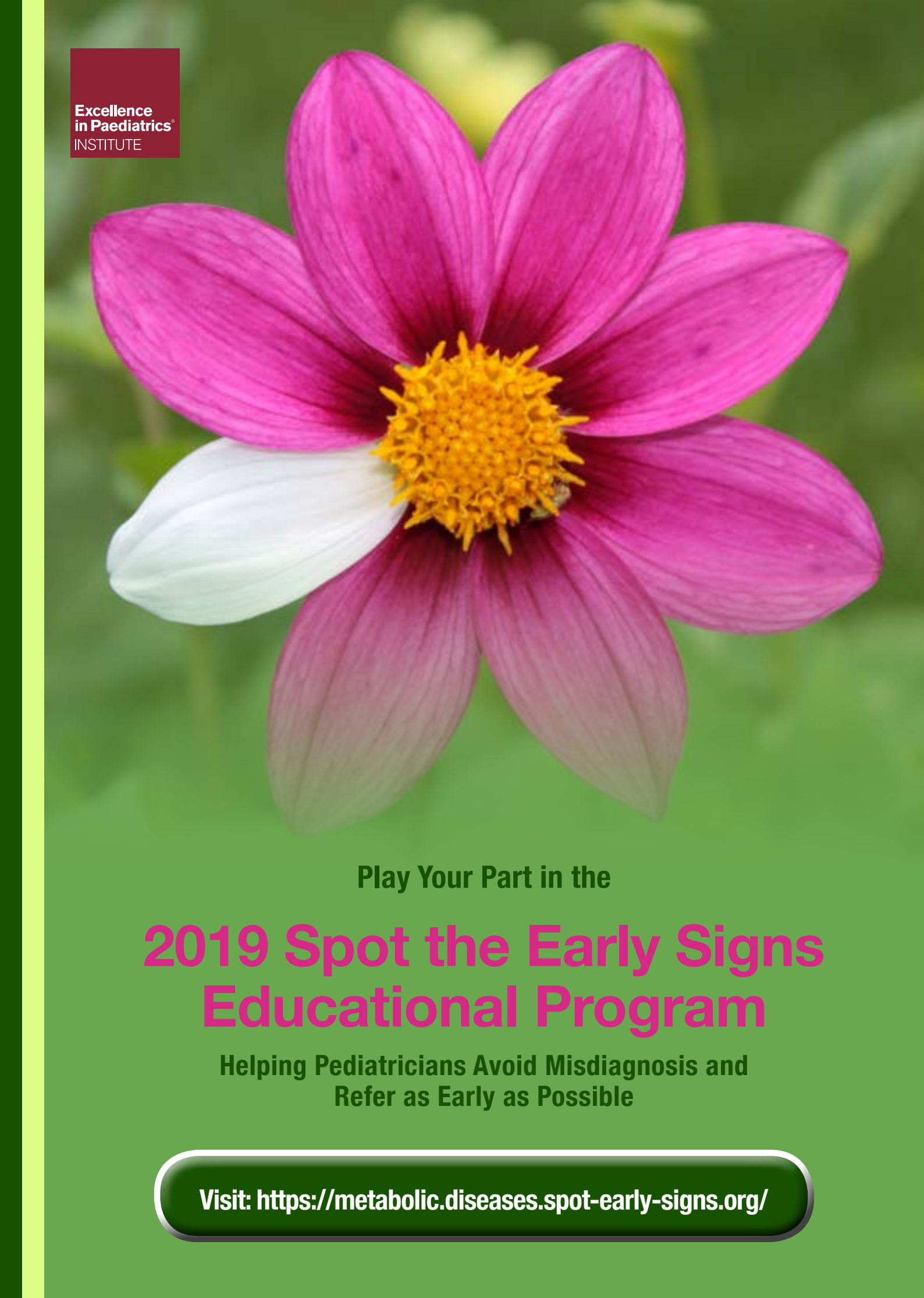
A home for scientifically sound, fully open access and peer-reviewed health research, *Cogent Medicine* offers authors a fast and affordable option for the publication of their work. The journal publishes experimental, translational and clinical approaches across all areas of biomedical sciences and clinical research and practice.

Cogent Medicine hosts supporting supplementary material and data files via the online repository figshare and article level metrics are available on all articles and offer a complete overview of how people are engaging with research. All articles published in the journal are freely available to access online.

As part of Taylor & Francis Group we are building on solid foundations and maintain the traditional values and high standards of an organization with more than 200 years of experience serving the research community.

CONFERENCE PROGRAMME

SCIENTIFIC PROGRAMME AND DAILY SCHEDULE


Excellence
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INSTITUTE
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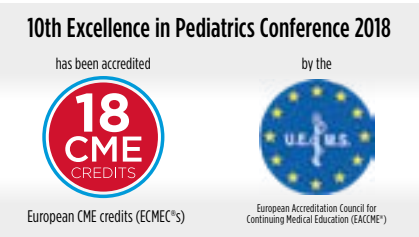
2019 Spot the Early Signs
Educational Program
Helping Pediatricians Avoid Misdiagnosis and
Refer as Early as Possible
Visit: https://metabolic.diseases.spot-early-signs.org/

CONTINUING MEDICAL EDUCATION (CME) AND SESSION EVALUATIONS



18 amount conference credits

The 10th Excellence in Pediatrics Conference has been granted 18 European CME credits (ECMEC®s) by the European Accreditation Council for Continuing Medical Education (EACCME®).

The 10th Excellence in Pediatrics Conference, Prague, Czech Republic, 06/12/2018-08/12/2018 has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®) with 18 European CME credits (ECMEC®s). Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.

Through an agreement between the Union Européenne des Médecins Spécialistes and the American Medical Association, physicians may convert EACCME® credits to an equivalent number of AMA PRACategory 1 CreditsTM. Information on the process to convert EACCME® credit to AMA credit can be found at www.ama-assn.org/education/earn-credit-participation-international-activities.

Session Evaluations

Please complete the Evaluation Forms for every Session that you may attend. EIP's staff will deliver them at the entrance of each hall at the beginning of each programme Section and will collect them at the exit when you are leaving the hall.

The feedback you provide enhances the ability of our Steering Committee and organisation staff to meet attendees' educational needs.

Session Types

Plenary Keynote Sessions
Single-speaker keynote lectures by leading experts, chosen to inspire as well as educate. Topics will be of broad interest to all who care for children and present state of the art science knowledge related to clinical practice and public health. There will be both opening and closing plenaries in 2018.

Advances & Updates Sessions
Designed to provide clinical updates and practical tips on specific topics that will improve the care general pediatricians deliver in their everyday practice. Usually includes at least 10 minutes for Q&A and audience interaction

Therapeutic Management
Sessions designed to provide attendees with the latest treatment plans and advice for particular conditions. Format usually involves 20-30 minutes for the main presentation and 10 minutes for Q&A.

How to… Sessions
Interactive sessions offering the opportunity to learn practice specific skills. These sessions include 1 or 2 expert facilitators who will use a variety of didactic formats to teach these skills. Participants can expect to leave the session with practical skills that they can apply in their everyday practice.

Workshops
Small groups of attendees allowing for maximum interaction with the facilitator and fellow attendees. Topics ranging from medical to professional development, publishing and leadership. Looking to develop the participant's practical skill set as an individual and team player.

Case Studies
The session format is an effective way to enable presentation and discussion on individual cases and then debate, amongst speaker and the audience, on the best course of action in each case. Audience will be able to interact with the speakers and participate in the discussion.

Masterclasses
Designed to cater for pediatricians looking to gain a deeper understanding of an area in pediatrics or a subspecialty, while providing a greater depth and level of detail in an interactive setting that is designed to encourage audience interaction and participation.

Health Policy Focus Group
The EiP Policy Focus Groups are meetings designed to examine current child health policies in subspecialties of pediatrics and are tasked with identifying barriers that need to be overcome to improve health outcomes. The concept being that by offering evidence-based recommendations and filling education and awareness gaps of healthcare professionals EiP are able to overcome specific barriers

DAILY PROGRAMME

PLENARY SESSIONS

DAY 1: Thursday 6 December 2018

17:00-18:30 CHAIRS' WELCOME & KEYNOTE PLENARY SESSIONS — Hall: A+B+C+D

17:00-17:30	**The Paediatrician of the Future**	TERENCE STEPHENSON Professor, Sir, DM, FRCPCH, FRCP, EIP Conference Co-Chair, Chair of the General Medical Council (UK), Nuffield Professor of Child Health, Institute of Child Health, UCL ,UNITED KINGDOM	**Learning Objectives:** (1) Understand that the pace of change in biomedical science and technology is very rapid. (2) Review that in the future children's healthcare will be more predictive, preventive, personalised and participatory. (3) Consider therefore whether we need to change how we train paediatricians today for the paediatrics of tomorrow.
17:30-18:00	**Why is Adolescent Health Important?**	JOAN-CARLES SURIS EIP Conference Co-Chair. Institute of Social and Preventive Medicine and Department of Pediatrics, Lausanne University Hospital, SWITZERLAND	**Learning Objectives:** (1) Define the importance of adolescent health. (2) Detail the reasons associated to the importance of adolescent health. (3) Understand the link between adolescent health and adult health.
18:00-18:30	**Adolescent Alcohol Use: What Do We Know and What Can We Do?**	JO INCHLEY HBSC International Coordinator, EIP Conference Co-Chair, University of St Andrews School of Medicine, UNITED KINGDOM	**Learning Objectives:** (1) Review recent trends in adolescent alcohol consumption within Europe. (2) Explore differences in alcohol use by gender, socio-economic status and geographical region. (3) Consider effective prevention strategies to reduce alcohol use among adolescents.

DAY 3: Saturday 8 December 2018

11:30-12:30 CLOSING PLENARY SESSION — Hall: A+B+C

11:30-12:15	**Arboviruses - The latest on Dengue, Chikungunya and Zika - What the Paediatrician Needs to Know**	COLIN MICHIE Consultant Paediatrician, American University of the Caribbean, USA	**Learning Objectives:** (1) Recognise the increasing rates of paediatric exposures to arthropod-borne viruses secondary to environmental disruption: a one health model. (2) Develop systems for diagnosing arbovirus infections with your local laboratory networks. (3) Design management plans to optimise patient care and collate data on the clinical impacts of arboviruses.
12:15-12:30	**Closing Comments**	JOAN-CARLES SURIS EIP Conference Co-Chair. Institute of Social and Preventive Medicine and Department of Pediatrics, Lausanne University Hospital, SWITZERLAND	

SPECIALTY TRACK 1

DERMATOLOGY

DAY 1: Thursday 6 December 2018

09:00-11:00 MORNING SESSIONS

PEDIATRIC DERMATOLOGY - ADVANCES AND UPDATES — Hall: A+B

Moderators: DIRK VAN GYSEL & BARBARA KUNZ

09:00-09:40	**Exanthems - Old and New**	DIRK VAN GYSEL Head of the Department of Paediatrics, O.L Vrouw Hospital Aalst. Board Member and Former Treasurer of the ESPD, BELGIUM	**Learning Objectives:** (1) Recognise the most common exanthems in childhood. (2) Understand the respective next steps to ascertain the diagnosis. (3) Decide about the necessity and, where appropriate, the mode of treatment.
09:40-10:20	**Genital Skin Conditions in Pediatric Dermatology**	MARIO CUTRONE Head of Pediatric Emergency and Outpatients Unit, part of the Pediatric Department of Dell'Angelo Hospital, Venice, ITALY	**Learning Objectives:** (1) Recognise the most common genital skin changes and conditions in newborn, child and adolescent (with a large slideshow of differential diagnosis). (2) Understand the respective next steps to ascertain the diagnosis. (3) Decide about the necessity and, where appropriate, the mode of treatment.
10:20-11:00	**Atopic Dermatitis - How to Improve Compliance**	SHERIEF JANMOHAMED Pediatric Dermatologist. University Hospital Brussels (UZ Brussel), Department of Dermatology, Brussels, BELGIUM	**Learning Objectives:** Latest Learning Objectives available at: https://eip-pediatrics-conference.ineip.org/

11:00-13:00 NOON SESSIONS

PEDIATRIC DERMATOLOGY: MASTERCLASS — Hall: Gracie

11:00-12:00	**Skin Lesions in Neonates - Skin, Hair and Nails - PART 1**	DIRK VAN GYSEL Head of the Department of Paediatrics, O.L Vrouw Hospital Aalst. Board Member and Former Treasurer of the ESPD, BELGIUM	**Learning Objectives:** (1) Recognise key symptoms and signs of some important skin conditions in neonates / infants and children. (2) Understand the respective next steps to ascertain the diagnosis. (3) Decide about the necessity and, where appropriate, the mode of treatment.
12:00-13:00	**Skin Conditions in Infants and Children - Skin, Hair and Nails - PART 2**	BARBARA KUNZ Specialist Dermatologist, Direction of Paediatric Dermatology, Dermatologikum Hamburg, Board Member of the European Society of Pediatric Dermatology (ESPD), GERMANY	

14:00-16:30 AFTERNOON SESSIONS

PEDIATRIC DERMATOLOGY - THERAPEUTIC MANAGEMENT — Hall: A+B

Moderators: DIRK VAN GYSEL & BARBARA KUNZ

14:00-14:40	**Common Skin Infections**	MARIANNE MORREN Attending Physician, Department of Women-Mother-Child Pediatric Dermatology Unit, Children's Hospital - CHUV University Hospital Lausanne, SWITZERLAND	**Learning Objectives:** (1) Recognise the most common skin infection in childhood. (2) Recognise skin infections needing immediate action. (3) Manage the most comment skin infections using up to date treatment strategies
14:40-15:20	**Advances in the Management of Acne**	JULIE LEYSEN Contact Allergy Unit, Department of Dermatology, University Hospital Antwerp, BELGIUM	**Learning Objectives:** (1) Understand the common presentations of acne in the different age groups. (2) Consider treatment with topical and/or systemic treatment.
15:20-16:00	**Management of Nevi**	MARC LACOUR Pediatrics and Pediatric Dermatology, Geneva, SWITZERLAND	**Learning Objectives:** (1) Understand the concept of cutaneous nevi and their origins. (2) Manage children with congenital or acquired melanocytic nevi. (3) Provide adequate primary prevention for melanoma.
16:00-16:30	**Instructive Cases Panel**	MARIANNE MORREN JULIE LEYSEN MARC LACOUR	**Learning Objectives:** Latest Learning Objectives avaialble at: www.eip-pediatrics-conference.ineip.org

SPECIALTY TRACK 2

RHEUMATOLOGY & NEPHROLOGY

DAY 1: Thursday 6 December 2018

09:00-09:45 MORNING SESSIONS

PEDIATRIC NEPHROLOGY - ADVANCES AND UPDATES

Hall: Harmonie

Moderator: TERENCE STEPHENSON

09:00-09:45	**Hypertension in Children**	TOMAS SEEMAN Department of Pediatrics, 2nd Faculty of Medicine, Charles University, Prague , CZECH REPUBLIC	**Learning Objectives:** Latest Learning Objectives available at: https://eip-pediatrics-conference.ineip.org/

11:00-13:00 NOON SESSIONS

PEDIATRIC RHEUMATOLOGY - ADVANCES AND UPDATES

Hall: C+D

Moderator: SYLVIA KAMPHUIS

11:00-11:30	**Clinical Presentations and Diagnosis of Juvenile Idiopathic Arthritis**	PAVLA DOLEZALOVA Professor of Paediatrics, Head of Paediatric Rheumatology Unit, Department of Paediatrics and Adolescent Medicine, General University Hospital and 1st Faculty of Medicine, Charles University, Prague, CZECH REPUBLIC	**Learning Objectives:** (1) Exploring common clinical presentations of various subtypes of JIA, main differential diagnosis. (2) How to confirm a JIA diagnosis. (3) Disease assessments: JIA disease activity and damage, functional assessment, patient- reported outcomes and JIA prognosis.
11:30-12:00	**Systemic Autoimmune Disease: What the Paediatrician Needs to Know**	SYLVIA KAMPHUIS Pediatric Rheumatologist/Immunologist, Pediatric Infectiology / Immunology / Rheumatology, Erasmus MC, University Medical Center Rotterdam, THE NETHERLANDS	**Learning Objectives:** (1) Learn about the prevalence of the different systemic autoimmune diseases. (2) Recognise disease patterns that direct you to the right diagnosis. (3) Understand the laboratory diagnostics that aid in recognising specific systemic autoimmune diseases
12:00-12:30	**Juvenile Idiopathic Arthritis (JIA) - Therapeutic Strategies**	PAVLA DOLEZALOVA Professor of Paediatrics, Head of Paediatric Rheumatology Unit, Department of Paediatrics and Adolescent Medicine, General University Hospital and 1st Faculty of Medicine, Charles University, Prague, CZECH REPUBLIC	**Learning Objectives:** (1) An overview of JIA therapeutic strategies. (2) Exploring the main principles, established (registered) treatments. (3) Therapeutic monitoring, treatment adverse effects and vaccinations.

PEDIATRIC RHEUMATOLOGY - ORAL PRESENTATIONS

Hall: C+D

Moderator: SYLVIA KAMPHUIS

12:30-13:00	**ID: 132** Assessment of Quality of Life in Children with Rheumatic Fever and Rheumatic Heart Disease Using Pediatric Quality of Life InventoryTM (PedsQL™) 3.0 Cardiac Module	Harjaningrum, Agnes Tri; Putra, Sukman Tulus; Sekartini, Rini; Munasir, Zakiudin; Ifran, Evita Kariani; Kadim, Muzal
	ID: 275 Characterization Of The Pain Experience At The Age Of 10 Years In A Portuguese Birth Cohort - Generation XXI	Gorito, Vanessa Oliveira; Monjardino, Teresa; Azevedo, Inês; Lucas, Raquel
	ID: 258 Rheumatic Carditis in Acute Rheumatic Fever in a High Income Country: a 12-years Single Center Experience in a Northern Region of Italy	Palleri, Daniela; Fabi, Marianna; Calicchia, Margherita; Miniaci, Angela; Tronconi, Elena; Donti, Andrea; Pession, Andrea; Lanari, Marcello

14:00-16:30 AFTERNOON SESSIONS

PEDIATRIC RHEUMATOLOGY & NEPHROLOGY BRIEFINGS

Hall: C+D

14:00-14:40	**Treatment of Systemic Lupus Erythematosus (SLE)**	KJELL TULLUS Consultant Paediatric Nephrologist at Great Ormond Street Hospital, London, UNITED KINGDOM	**Learning Objectives:** (1) Understand the different possibilities in treating lupus. (2) Understand differences between traditional and newer treatment protocols. (3) Know about developments for the future in lupus treatment.
14:40-15:20	**Nephrotic Syndrome**		**Learning Objectives:** (1) Learn how to diagnose idiopathic NS and its most important differential diagnosis. (2) Recognise how to treat the first episode of NS and relapses of NS. (3) Know how to treat frequently relapsing and steroid dependent NS. (4) Understand how steroid resistant NS is treated.
15:20-16:00	**Urinary Tract Infections in Children**		**Learning Objectives:** (1) Learn how to diagnose and treat UTI. (2) Know how to investigate children with a UTI. (3) Review the importance of vesicoureteric reflux and how it should be treated. (4) Know when to use prophylactic antibiotics. (5) Understand the long term prognosis of children who has had a UTI.

PEDIATRIC RHEUMATOLOGY - ADVANCES AND UPDATES

Hall: C+D

Moderator: SYLVIA KAMPHUIS

16:00-16:30	**Children with Recurrent Fever: Autoinflammatory Diseases: Where We Are Today?**	JORDI ANTON Head of Department, Pediatric Rheumatology, Hospital Sant Joan de Déu. Associate Professor, Universitat de Barcelona. Barcelona, SPAIN	**Learning Objectives:** (1) Include autoinflammatory diseases in the differential diagnosis of a child with recurrent fever. (2) Review which are the main groups of autoinflammatory diseases. (3) Know about treatment strategies in patients with autoinflammatory diseases.

SPECIALTY TRACK 3

GASTROENTEROLOGY

DAY 1: Thursday 6 December 2018

09:00-11:00 MORNING SESSIONS

PEDIATRIC GASTROENTEROLOGY - ADVANCES AND UPDATES

Hall: C+D

Moderator: MARK BEATTIE

09:00-09:40	**Advances in the Management of Intestinal Failure**	AKSHAY BATRA Consultant in Paediatric Gastroenterology and Nutrition, University Hospital Southampton, UNITED KINGDOM	**Learning Objectives:** (1) Describe the aetiology and outcomes of intestinal failure. (2) Understand the principles of management of intestinal failure. (3) Discuss the developments in treatment over the last decade and its impact.
09:40-10:20	**Probiotics and GI Diseases**	AZIZ KOLEILAT Associate Professor, Vice General Secretary (PASPGHAN) foreign affairs, Pan Arab Society Pediatric Gastroenterology,Hepatology & Nutrition, Makassed University General hospital Gastroenterology & Asthma, LEBANON	**Learning Objectives:** (1) The evidence of the role of probiotics and mechanism in gastrointestinal diseases in children. (2) Practices for probiotics in the treatment of gastrointestinal disorders. (3) The role of probiotics and efficacy in human physiology, metabolism, health, immunity in GI disorders.
10:20-11:00	**Allergic Gastrointestinal Disease**	LEANNE GOH Consultant in General Paediatrics and Paediatric Allergy University College London Hospital, UNITED KINGDOM	**Learning Objectives:** (1) Gastrointestinal manifestations of non-IgE mediated food allergy in children. (2) Investigation and management options. (3) Role of food allergies in common gastrointestinal disorders (i.e. GORD, colic and constipation).

11:00-13:00 NOON SESSIONS

PEDIATRIC GASTROENTEROLOGY - THERAPEUTIC MANAGEMENT

Hall: A+B

Moderator: TERENCE STEPHENSON

11:00-11:30	**Constipation in Childhood. Clinical Features, Diagnosis and Management**	MARK BEATTIE Professor, Consultant Paediatric Gastroenterologist, University Hospital Southampton, UNITED KINGDOM	**Learning Objectives:** (1) Understand the epidemiology, definitions and clinical presentation of constipation. (2) Review recent evidence based guidance. (3) Consider holistic treatment strategies involving both lifestyle and medication approaches.
11:30-12:00	**Early Diagnosis of Coeliac Disease - Pathways for Diagnosis of Coeliac Disease in Children**	AKSHAY BATRA Consultant in Paediatric Gastroenterology and Nutrition, University Hospital Southampton, UNITED KINGDOM	**Learning Objectives:** (1) Describe the presentation of coeliac disease in children. (2) Understand the predictive value of serological tests and role of HLA. (3) Discuss pathway for diagnosis of coeliac disease in symptomatic and asymptomatic children.
12:00-12:30	**Intestinal Failures - Instructive Cases Panel**	RAFEEQ MUHAMMED AKSHAY BATRA MARK BEATTIE	**Learning Objectives:** Latest Learning Objectives available at: https://eip-pediatrics-conference.ineip.org/
12:30-13:00	**Gastro-oesophageal Reflux: When to Investigate? How to Treat?**	YVAN VANDENPLAS Professor, Head of Department of Paediatrics, Universitair Ziekenhuis Brussels, BELGIUM	**Learning Objectives:** (1) What is the natural evolution of reflux and reflux disease in infants? (2) When to investigate ? Which investigations? (3) Which treatment modalities?

14:00-16:30 AFTERNOON SESSIONS

PEDIATRIC GASTROENTEROLOGY - MASTERCLASS — Hall: Harmonie

14:00-16:00

Inflammatory Bowel Disease: Epidemiology, Diagnosis and Management

MARK BEATTIE
Professor, Consultant Paediatric Gastroenterologist, University Hospital Southampton, UNITED KINGDOM

RAFEEQ MUHAMMED
Consultant Paediatric Gastroenterologist and Clinical Lead for inflammatory bowel diseases (IBD) services in Birmingham Children's Hospital, UNITED KINGDOM

Learning Objectives:

(1) Understand the epidemiology, clinical features and practical management of Inflammatory Bowel Disease in childhood. (2) Review recent research and clinical guidelines. (3) Consider the practicalities of prompt diagnosis, disease assessment and clinical management .

PEDIATRIC GASTROENTEROLOGY - ORAL PRESENTATIONS — Hall: Harmonie

Moderator: MARK BEATTIE

16:00-16:30

ID: 220 An Investigation Into Factors That Affect The Decision Of Parents To Use Blended Diets With Their Gastrostomy-Fed Children	**Breaks, Anne**; Smith, Christina; Horne, Rob; Bloch, Steven
ID: 167 Hepatic Mass or Otherwise?	**Vlad, Raluca Maria**; Pacurar, Daniela
ID: 232 Bilious Vomiting In Newborn: The Role Of Upper Gastrointestinal Contrast Study	**De Nardo, Maria Chiara**; Casarotto, Serena; Kopuri, Anil; Desai, Prakash

SPECIALTY TRACK 4

NEUROLOGY

DAY 1: Thursday 6 December 2018

09:00-11:00 MORNING SESSIONS

PEDIATRIC NEUROLOGY - ORAL PRESENTATIONS - PART 1 — Hall: Gracie

Moderator: PHIL FISCHER

09:00-11:00

ID: 269 Sleep Habits In Children With ADHD And The Effects Of Medication	**Adrião, Mariana**; Guardiano, Micaela; Rocha, Sofia; Afonso, Sandra; Glória E Silva, Filipe
ID: 211 Neuromyelitis Optica - A Case Report	**Rodrigues, Jorge**; Ferreira Santos, Mafalda; Magalhães, Joana; Palavra, Filipe; Santos, Elisabete; Faria, Cristina
ID: 215 The Role of Methylphenidate XL in Narcolepsy in Children	**Ratcliffe, Anna Marion**; Gandhi, Dilip; Kallappa, Chetena
ID: 257 Headache, Neurologic Deficits And Cerebrospinal Fluid Lymphocytosis Associated With Borrelia lusitaniae Infection	**Carvalho, Ana Araújo**; Vieira, José Pedro; Carvalho, Isabel Lopes; Brito, Maria João
ID: 286 Mutation Spectrum In Turkish NF1 Patients	Onay, Huseyin; **Atan Sahin, Ozlem**; Isik, Esra; Solmaz, Asli Ece; Atik, Tahir; Ozkinay, Ferda
ID: 248 Effect Of Treadmill Training On Executive Function Behaviors And Quality Of Life In Children With Attention Deficit Hyperactivity Disorder	**Durgut, Elif**; Örengül, A. Cahid; Algun, Z. Candan
ID: 164 The Immediate Effects of Ankle Foot Orthosis on Balance in Children with Cerebral Palsy	Keçik, Ali Caner; **Saka, Seda**; Tunali, Nur; Yavuzer, Melek Güneş

11:00-13:00 NOON SESSIONS

PEDIATRIC NEUROLOGY - ADVANCES AND UPDATES

Hall: Euforia

Moderator: CHARLOTTE HAAXMA

11:00-11:40	**Neuromuscular Disorders**	RICHARD FINKEL Paediatric Neurologist and Chief, Division of Neurology, Nemours Children's Hospital, Orlando, USA	**Learning Objectives:** (1) Learn the early signs and symptoms of neuromuscular disorders. (2) Learn why early diagnosis and management of children with neuromuscular disorders is important. (3) Learn about new treatments for neuromuscular disorders and the role of the primary care physician.
11:40-12:20	**Orthostatic Intolerance - Diagnosis, Management and Communication with Patients**	PHIL FISCHER Professor of Pediatrics, Consultant, Division of General Pediatric and Adolescent Medicine, Department of Pediatric and Adolescent Medicine, Mayo Clinic, USA	**Learning objectives:** (1) Explain the diagnostic criteria for orthostatic intolerance and postural orthostatic tachycardia syndrome. (2) Describe the management of adolescents with orthostatic intolerance, with and without postural tachycardia. (3) Identify key techniques in communicating with adolescents suffering from "functional" disorders.
12:20-13:00	**How to Understand and Diagnose Paediatric Movement Disorders**	CHARLOTTE HAAXMA Pediatric Neurologist, Department of Neurology, Amalia Children's Hospital, Radboudumc, Nijmegen, THE NETHERLANDS	**Learning Objectives** (1) Understand the clinical hallmarks and classification of pediatric movement disorders. (2) Knowing what the signs are and when to refer to a specialist (3) Review recent literature on genetic etiologies.

14:00-16:30 AFTERNOON SESSIONS

PEDIATRIC NEUROLOGY - THERAPEUTIC MANAGEMENT

Hall: Euforia

Moderator: RICHARD FINKEL

14:00-14:40	**Reviewing Treatment Options for Paediatric Movement Disorders**	CHARLOTTE HAAXMA Pediatric Neurologist, Department of Neurology, Amalia Children's Hospital, Radboudumc, Nijmegen, THE NETHERLANDS	**Learning Objectives:** (1) An overview of current treatment options available. (2) Consider targeted treatment strategies. (3) Emerging treatments on the horizon.
14:40-15:20	**Dravet Syndrome: Early Diagnosis - Treatment and Management from the Diagnosis to Adulthood**	CHARLOTTE DRAVET Honorary Consultant in pediatric epilepsy at the Infantile Neuropsychatric Unit, Fondazione Policlinico Universitario Agostino Gemelli and Università Cattolica del Sacro Cuore, Roma, ITALY	**Learning Objectives:** (1) Learn how to diagnose Dravet syndrome in the first two years of life. (2) Review what are the objectives of the pharmacological treatment. (3) How to manage all the aspects of the disease: epilepsy, cognitive, behavioural, and motor impairment.
15:20-16:00	**Understanding and Managing Functional Neurologic Disorders in Adolescents**	PHIL FISCHER Professor of Pediatrics, Consultant, Division of General Pediatric and Adolescent Medicine, Department of Pediatric and Adolescent Medicine, Mayo Clinic, USA	**Learning Objectives:** (1) Understand a framework to correlate and differentiate functional, structural, and psychiatric disorders. (2) Review the epidemiology of functional disorders. (3) Consider practical strategies to help patients move toward recovery from functional neurologic disorders.

PEDIATRIC NEUROLOGY - ORAL PRESENTATIONS - PART 2

Hall: Euforia

Moderator: RICHARD FINKEL

16:00-16:30	**ID: 285** Bilateral Thalamic Necrotizing Encephalopathy	**Martins, Inês Fidalgo**; Silva, Rita; Pereira, Gabriela; Vieira, José Pedro; Brito, Maria João
	ID: 116 Comparison of screen viewing time (SVT) in preschool children with typical development and those with developmental delays: A retrospective pilot study	Kang, Ying Qi; Ramkumar, Aishworiya; Tung, Serena; Chan, Yiong Huak; Mulay, Kalyani; Chong, Shang Chee; **Kiing, Jennifer**
	ID: 207 Correlation between Headaches and Electroencephalographic Changes	**Tavchioska, Gabriela**

SPECIALTY TRACK 5

ADOLESCENT MEDICINE

DAY 1: Thursday 6 December 2018

09:00-11:00 MORNING SESSIONS

ADOLESCENT MEDICINE - ADVANCES AND UPDATES

Hall: Euforia

Moderator: JO INCHLEY

09:00-09:30	**Gendered Approaches to Adolescent Health Promotion and Healthcare**	ALINA COSMA Post-doctoral Researcher, Utrecht University, Faculty of Social Sciences, Department of Interdisciplinary Social Sciences (ASW), THE NETHERLANDS	**Learning Objectives:** (1) To outline gender specific health and well-being profiles for adolescent boys and girls. (2) To identify the links between gender, health and social-economic determinants of health and well-being. (3)To illustrate strategies that facilitate gendered health promotion and healthcare.
09:30-10:00	**Transgender Youth/Gender Dysphoria**	LAURA CHARLTON Gender Identity Development Service, The Tavistock and Portman, NHS Foundation Trust, UNITED KINGDOM	**Learning Objectives:** Latest Learning Objectives available at: https://eip-pediatrics-conference.ineip.org/
10:00-10:30	**Adolescent Peer Violence: Forms, Determinants and Outcomes**	SOPHIE WALSH Associate Professor, Department of Criminology, Bar Ilan University, HBSC, ISRAEL	**Learning Objectives:** (1) Understand forms and prevalence of peer violence among adolescents around the industrialised world. (2) Review what the determinants and outcomes of involvement in peer violence can be for both the perpetrator and the victim. (3) Consider holistic strategies for prevention and intervention to prevent peer violence and its consequences.
10:30-11:00	**Adolescent Mental Health & Wellbeing Update**	FIONA BROOKS Acting Dean and Professor of Public Health in the Faculty of Health, University of Technology, Sydney, AUSTRALIA	**Learning Objectives:** (1) Knowledge of trends in adolescent mental health and emotional well-being. (2) An understanding of the determinants of adolescent mental health. (3) A critical understanding of the protective health that contributes to improving adolescent mental health and emotional well-being, including emerging factors.

11:00-13:00 NOON SESSIONS

ADOLESCENT SEXUAL HEALTH

Hall: Harmonie

Moderator: FIONA BROOKS

11:00-11:40	**Last and First Intercourse, What Can 15-year-old High School Students Tell Us? Evidence from the Health Behaviour in School-aged Children (HBSC) Study**	EMMANUELLE GODEAU Public Health MD, PhD, senior researcher at the French National School of Public Health (EHESP), Rennes, UMR 1027 Inserm-UPS, Toulouse, FRANCE	**Learning Objectives:** (1) Know the prevalence of sexual intercourse at age 15 in European countries and Canada, and the differences between first and last intercourse. (2) Consider the gender differences in sexual behaviours at age 15 and in different cultural context. (3) Link those findings to recommendations around sexual education and programmes.
11:40-12:20	**A Persistent Inequality in Gender and Sexual Minority Adolescents' Health: Evidence from the Health Behaviour in School-aged Children (HBSC) Study**	ANDRAS KOLTO Postdoctoral Researcher, Health Promotion Research Centre, School of Health Sciences, National University of Ireland Galway, IRELAND	**Learning Objectives:** (1) Understand the LGBT+ Health paradox and its implications for adolescent health. (2) Review evidence from the HBSC Study regarding romantic attraction and health indicators in 15-year-old adolescents in European countries. (3) Consider possible ways to fight the LGBT+ health inequality, involving personal actions, comprehensive sexual education, anti bullying programmes and gay-straight alliances.
12:20-13:00	**Sexting: What is It and How to Deal with It**	YARA BARRENSE-DIAS Research Manager, Institute of Social and Preventive Medicine, Lausanne, SWITZERLAND	**Learning Objectives:** (1) Understand the different dimensions of the definition of sexting. (2) Understand peer reactions in terms of social judgements when sexting goes wrong. (3) Consider education and prevention strategies / messages linked to the activity of sexting.

14:00-16:30 AFTERNOON SESSIONS

ADOLESCENT MEDICINE - ADVANCES AND UPDATES
Hall: Gracie

Moderator: JOAN-CARLES SURIS

14:00-14:30	**How to Address Cannabis Use with Teenagers and Their Parents – Tackling Myths and Exploring Adverse Impacts**	RICHARD BELANGER Assistant Professor Undergraduate Department of Pediatrics, Faculty of Medicine - Laval University, Pediatrician / Doctor of Adolescence - Mother and Child Center Soleil du CHU de Québec, CANADA	**Learning Objectives:** (1) Review several myths surrounding cannabis that are still tenacious both in the public debate and the medical culture. (2) Focus on major facts important to teenagers around cannabis and ways to efficiently illustrate them with diverse objectives in head: prevention, screening, and treatment. (3) Identify strong messages that need to be conveyed to parents on how to discuss cannabis within their family.
14:30-15:00	**Adolescent Obesity and Related Health Behaviours**	JELENA GUDELJ RAKIC Head of Center of Health Promotion, Institute of Public Health of Serbia, "Dr Milan Jovanovic Batut" SERBIA	**Learning Objectives:** (1) Understand health behaviours in adolescents related to overweight and obesity. (2) Review trends in overweight and obesity in adolescents across Europe. (3) Consider recommendations for priority areas of action.

ADOLESCENT TRANSITION WORKSHOP
Hall: Gracie

15:00-16:30	**Why Reinvent the Wheel? A Starting Point to Create a Transition Program**	JOAN-CARLES SURIS EIP Conference Co-Chair. Institute of Social and Preventive Medicine and Department of Pediatrics, Lausanne University Hospital, SWITZERLAND CHRISTINA AKRE Lausanne University Hospital, SWITZERLAND	**Learning Objectives:** (1) Outline the needs of your own program. (2) Define the main steps of a transition program. (3) Use a global checklist to create a transition program.

DAY 2: Friday 7 December 2018

14:00-16:00 EARLY AFTERNOON SESSIONS

ADOLESCENT MEDICINE - ADVANCES AND UPDATES
Hall: Harmonie

Moderator: JO INCHLEY

14:00-16:00	**Healthy Adolescence: Promoting Physical Activity and Positive Health Outcomes During the Adolescent Years**	JO INCHLEY University of St Andrews, UK ZDENEK HAMRIK Palacky University, CZECH REPUBLIC PETR BADURA Palacky University, CZECH REPUBLIC MICHAL KALMAN Palacky University, CZECH REPUBLIC	**PART 1 - Maturational Effects on Physical Activity Among Early Adolescents** **PART 2 - Physical and Social Environmental Influences on Adolescent Physical Activity and Screen Time** **PART 3 - When Children Play, They Feel Better: Organised Activity Participation and Health in Adolescents** **PART 4 - Recent Findings from the Czech Health Behaviour in School-aged Children 2018 Survey** **Learning Objectives:** (1) Explore personal and environmental factors associated with adolescent physical activity and screen time. (2) Investigate health benefits associated with physical activity in adolescents. (3) Present recent findings from the Czech Health Behaviour in School-aged Children (HBSC) study

16:30-18:30 AFTERNOON SESSIONS

ADOLESCENT MEDICINE - ORAL PRESENTATIONS
Hall: Harmonie

Moderator: JOAN-CARLES SURIS

16:30-18:30	**ID: 280** Parental Control and other Social Factors on Adolescent Internet Addiction	**Formiga, Adriana**; Vieira Martins, Miguel; Santos, Constança; Sousa, Diana; Resende, Carla; Campos, Ricardo; Nogueira, Natália; Carvalho, Paula; Ferreira, Sofia
	ID: 254 Internet Addiction and Health Status Among Adolescents – A Cross-Sectional Study	**Vieira Martins, Miguel**; Formiga, Adriana; Santos, Constança; Sousa, Diana; Resende, Carla; Campos, Ricardo; Nogueira, Natalia; Carvalho, Paula; Ferreira, Sofia
	ID: 262 Adolescent Obesity – A Health Problem Beyond Adiposity	**Castelão, Mafalda**; Dias-Ferreira, Pedro; Videira-Silva, António; Freira, Sílvia; Fonseca, Helena

16:30-18:30

ID: 240 Suicide Prevention in Luxembourg: Using the HBSC Symptom Checklist as an Alternative Screening Tool for Adolescents at Risk	**Catunda, Carolina**; Van Duin, Claire; Heinz, Andreas; Willems, Helmut
ID: 241 Gender Differences In Risk Factors For Suicidal Behaviours In Adolescents	**Van Duin, Claire Martine**; Catunda, Carolina; Heinz, Andreas; Willems, Helmut
ID: 276 Anxiety and Academic Performance in Adolescents	**Rodrigues, Ana Barbosa**; Ribeiro, Marta; Dias-Ferreira, Pedro; Freira, Silvia; Fonseca, Helena
ID: 148 Adolescent Immigrants in Italy: internalising problems, bullying behaviours and socioeconomic status.	**Borraccino, Alberto**; Dalmasso, Paola; Charrier, Lorena; Vieno, Alessio; Lazzeri, Giacomo; Lemma, Patrizia
ID: 238 Prevalence of Self-report Chronic Pain among Adolescents in 42 Countries and Regions	**Gobina, Inese**; Villberg, Jari; Välimaa, Raili; Tynjälä, Jorma; Whitehead, Ross; Cosma, Alina; Brooks, Fiona; Cavallo, Franco; Ng, Kwok; De Matos, Margarida Gaspar; Villerusa, Anita

DAY 3: Saturday 8 December 2018

09:30-11:30 **MORNING SESSIONS**

ADOLESCENT MEDICINE - ADVANCES AND UPDATES

Hall: Harmonie

09:30-11:30

Skilful Communication with Adolescents and their Families

ANNE MEYNARD
Family medicine and Adolescent health, Lecturer, Primary Care Teaching Unit, Faculty of medicine, Geneva University, Euteach Faculty, SWITZERLAND

ANNA SONKIN
Consultant in Pediatrics and palliative care and communication skills trainer, Chaika Clinics, Medical School "Soobshenie" Moscow, RUSSIA

Learning Objectives:
(1) Discuss the rationale to increase capacity of paediatricians to communicate effectively with adolescents. (2) Define the specificities of an interview with an adolescent and how to skilfully build a relationship. (3) Analyse complex situations with adolescents and the skills needed to answer to those (e.g. ethics, confidentiality, role of parents, or the role of other professionals).

SPECIALTY TRACK 6

ENDOCRINOLOGY & GROWTH

DAY 2: Friday 7 December 2018

09:00-11:00 **MORNING SESSIONS**

PEDIATRIC ENDOCRINOLOGY - ADVANCES AND UPDATES

Hall: A+B

Moderator: ALAN. D. ROGOL

09:00-09:40

Congenital Hypothyroidism - Screening and Management

TIM CHEETHAM
University Reader and Consultant Paediatric Endocrinologist, Newcastle University, Newcastle upon Tyne Hospitals NHS Foundation Trust, Chair of the Joint Standing Committee for Congenital Hypothyroidism; Co-opted member of the BSPED Clinical Trials Unit; Associate editor of Archives of Disease in Childhood; Medical Advisor to the British Thyroid Foundation, UNITED KINGDOM

Learning Objectives:
(1) Appreciate the fact that congenital hypothyroidism (CHT) represents a clinical and biochemical spectrum. (2) Recognise how and why the biochemical picture in CHT can change with time. (3) Understand why effective screening programmes for CHT do not have a sensitivity of 100%.

09:40-10:20

The Latest Advances in Technologies for the Management of Diabetes in Children and Adolescents

REVITAL NIMRI
Director of the Scientific and Technology Diabetes Service, Diabetes Technology Center at the Institute for Endocrinology and Diabetes, National Center for Childhood Diabetes, Schneider Children's Medical Center of Israel, ISRAEL

Learning Objectives:
(1) Understanding the challenges of treating children and adolescents with Type 1 diabetes. (2) Description of closed-loop systems (artificial pancreas) and review of recent studies and advancements in the field. (3) Decision support systems and review of new digital tools for personalized management of Type 1 diabetes - "the emerging digital clinic".

10:20-11:00

New Treatments for Congenital Adrenal Hyperplasia and Adrenal Failure

NILS P KRONE
Reader in Paediatric Endocrinology and Honorary Consultant Paediatric Endocrinologist, Academic Unit of Child Health Department of Oncology & Metabolism, University of Sheffield Sheffield Children's Hospital, UNITED KINGDOM

Learning Objectives:
Latest Learning Objectives available at: https://eip-pediatrics-conference.ineip.org/

11:00-13:00 NOON SESSIONS

PEDIATRIC ENDOCRINOLOGY - THERAPEUTIC MANAGEMENT
Hall: A+B

Moderators: TIM CHEETHAM & ALAN. D. ROGOL

11:00-11:40	**Long-acting Growth Hormone. What to Know and How to Support the Specialist as a Member of the Care Team**	ALAN. D. ROGOL Professor Emeritus, (Pediatrics and Pharmacology), University of Virginia, USA	**Learning Objectives:** (1) Understand the various conditions for which growth hormone therapy is approved. (2) Understand the expected efficacy and common adverse events from growth hormone therapy as part of the Specialist/Generalist care team. (3) Learn the efficacy and safety issues for the newer forms of long acting recombinant growth hormone.
11:40-12:20	**Bone Disease in Children – When to Use and When not to use Bisphophanates**	NICK SHAW Consultant Paediatric Endocrinologist, Clinical Lead for Complex Childhood Osteogenesis Imperfecta, Birmingham Children's Hospital, ESPE Summer School Coordinator, Honorary Professor, Institute of Metabolism and Systems Research, University of Birmingham, UNITED KINGDOM	**Learning Objectives:** (1) Understand the spectrum of bone disease in children. (2) Review the pathophysiology of selected bone disorders. (3) Explore when bisphosphonates would be appropriate in management.

PEDIATRIC ENDOCRINOLOGY - INTERACTIVE CASE STUDIES
Hall: A+B

12:20-12:40	**Growth Curves and their Interpretation**	ALAN. D. ROGOL TIM CHEETHAM NILS P KRONE NICK SHAW	**Learning Objectives:** Latest Learning Objectives available at: https://eip-pediatrics-conference.ineip.org/
12:40-13:00	**Short Stature**		

14:00-16:00 EARLY AFTERNOON SESSIONS

PEDIATRIC ENDOCRINOLOGY - ADVANCES AND UPDATES
Hall: C+D

Moderator: NICK SHAW

14:00-15:00	**Turner Syndrome - Through the Ages to Adulthood**	ALAN. D. ROGOL Professor Emeritus, Pediatrics and Pharmacology, University of Virginia, USA	**Learning Objectives:** (1) Know the signs and symptoms of Turner syndrome at various ages. (2) Understand that the transition from adolescence to emerging adult is a key time for adolescents with Turner syndrome. (3) Understand that females with Turner syndrome require lifetime monitoring of multi organ systems.
15:00-16:00	**Suspected Endocrine Disease – When to Test and When not to Test**	TIM CHEETHAM University Reader and Consultant Paediatric Endocrinologist, Newcastle University, Newcastle upon Tyne Hospitals NHS Foundation Trust, Chair of the Joint Standing Committee for Congenital Hypothyroidism; Co-opted member of the BSPED Clinical Trials Unit; Associate editor of Archives of Disease in Childhood; Medical Advisor to the British Thyroid Foundation, UNITED KINGDOM	**Learning Objectives:** (1) Understand why the healthy obese child tends to be tall and not short. (2) Recognise the clinical pointers that suggest endocrine disease in the short child. (3) Appreciate the physiological milestones that can be used to rule out endocrine disease.

16:30-18:30 AFTERNOON SESSIONS

PEDIATRIC ENDOCRINOLOGY - ORAL PRESENTATIONS
Hall: Forum

Moderator: ALAN. D. ROGOL

16:30-18:30	**ID: 170** An Unusual Case Of Hyperthyroidism	Karsas, Maria
	ID: 206 Design of the PESCA study on Cardiovascular Health in school-aged children in Spain	**Zárate Osuna, Fernando**; Gutiérrez, Alejandra; Cid París, Ester; Sánchez López, Mairena; Schröder, Helmut; González-Gross, Marcela

16:30-18:30

ID: 197 Effects Of Growth Hormone Replacement Therapy On Thyroid Function Of Children And Adolescents With Idiopathic Growth Hormone Deficiency	**Rey Y Formoso, Vicente**; Aguiar, Benedita; Santos Silva, Rita; Costa, Carla; Castro Correia, Cíntia; Fontoura, Manuel
ID: 159 Neonatal Hypoglycemia In Newborns Without Risk Factors	**Nicolas, Georges**; Chaaban, Riham; Faddous Khalifeh, Marie-Claude; Souaiby, Juliana; Salemeh, Yara
ID: 192 Maternal Interpretation of Weight Gain Patterns of Infants and the Psychological Impact of Growth Faltering in a Suburban Sri Lankan Population	**Rodrigo, Ishani Dushmanthi**; Wijewardhana, Chathuni Jayeshmi; Bandara, Kosala Senadhi; Lakshan, Viraj Chandima; Wijesinghe, Kosala Dananjaya; Rathnayake, Induma Nevinda; Manathunga, Nirmala Priyadarshanie
ID: 271 "Not Every Neonatal Adrenal Crisis Is Adrenal Hyperplasia"	**Leite, Sara Silva**; Figueiredo De Matos, Catarina; Freitas, Joana; Oliveira, Maria João; Borges, Teresa
ID: 290 The First Growth Hormone Treatment in a Prader-Willi Syndrome Patient in Indonesia: A Case Report	**Pramesti, Dwi Lestari**; Pulungan, Aman B
ID: 184 Primary Hypothyroidism In Children: Unusual Clinical Presentation	**Soh, Ser Yee**; Vasanwala, Rashida Farhad
ID: 186 Biochemical Effects Of High Dose Vitamin D Treatment In Preterm Infants	**Lim, Chun**; Thambapillai, Sasha; Eisenhut, Michael; Chetcuti-Ganado, Claudia

SPECIALTY TRACK 7

INFECTIOUS DISEASES

DAY 2: Friday 7 December 2018

09:00-11:00 **MORNING SESSIONS**

PEDIATRIC INFECTIOUS DISEASES - MASTERCLASS

Hall: Harmonie

09:00-11:00

Tropical Infectious Diseases 2018 - Malaria, arboviruses, Ebola and co-infections

AUBREY CUNNINGTON
Clinical Senior Lecturer in Paediatric Infectious Diseases at Imperial College, and honorary Consultant in Paediatric Infectious Diseases, Imperial College London, UNITED KINGDOM

Learning Objectives Part 1 - Epidemiology:

(1) Understand the epidemiology of Malaria, arboviruses, Ebola and co-infections. (2) Review reports of changing epidemiology. (3) Consider implications of epidemiology for your patients.

Learning Objectives Part 2 - Clinical features:

(1) Understand the clinical presentations of Malaria, arboviruses, Ebola and co-infections. (2) Review literature describing predictors of adverse outcomes. (3) Consider how data from endemic countries applies to non-endemic settings.

Learning Objectives Part 3 - Practical management of the returning child traveller:

(1) Understand the emergency management of Malaria, arboviruses, Ebola and co-infections. (2) Review clinical trials of new treatments. (3) Consider how best to manage patients with these diseases in your own setting.

11:00-13:00 **NOON SESSIONS**

PEDIATRIC INFECTIOUS DISEASES - ORAL PRESENTATIONS

Hall: Forum

Moderator: AUBREY CUNNINGTON

11:00-13:00

ID: 133 Evaluation of Adhesion Molecules in Children with Community Acquired Pneumonia	**Tanir Basaranoglu, Sevgen**; Ozsurekci, Yasemin; Aykac, Kubra; Iyigun, Irem; Satirer, Ozlem; Akin, Mustafa Senol; Ceyhan, Mehmet
ID: 138 Factors Associated With Delayed Vaccination In Children	**Al Saleh, Abdullah Saleh**
ID: 110 Incidence of Chlamydia,Gonorrhea, and Azithromycin Resistant Chlamydia in Adolescent Population	**Sainz, Katelyn Marie**; Marchand, Greg J.; King, Alexa; Ware, Kelly

11:00-13:00	**ID: 102** Measles a comeback in Bulgaria, claiming victims among children	**Komitova, Radka Todorova**; Kevorkyan, Ani Kevork; Boykinova, Oliana Borisova; Krumova, Stefka Ivanova; Atanasova, Maria Vasileva; Stoilova, Yordanka Dimitrova; Kunchev, Agnel Angelov; Troyancheva, Monika
	ID: 125 Mycoplasma pneumoniae Encephalitis - Infectious Or Immune-mediated Disease?	**Gomes, Sílvia A.**; Silva, Tiago; Conceição, Carla; Vieira, José Pedro; Brito, Maria João
	ID: 130 Oxidant and Antioxidant Balance in Children with Community-Acquired Pneumonia	**Aykac, Kubra**; Ozsurekci, Yasemin; Tanir Basaranoglu, Sevgen; Avcioglu, Gamze; Karadag Oncel, Eda; Erel, Ozcan; Ceyhan, Mehmet
	ID: 225 Positive Blood Cultures in a Level II Pediatrics Department: 2007-2016	**Ferreira, Mariana**; Santos, Mafalda; Rodrigues, Jorge; Diogo, Clara; Resende, Catarina; Baptista, Cristina; Faria, Cristina
	ID: 178 Microbiological Flora Different Biotopes Monitoring in Oncohematological Patients and Analysis of Antibiotic Resistance.	**Bulegenova, Minira**; Arinova, Aizada; Rakhmanova, Arai
	ID: 251 Human Papilloma Virus (HPV) And The HPV Vaccination In Teenage Boys: Parental Knowledge And Acceptance	**Azevedo, Isabel**; Covas, Raquel; Carvalho, Cristiana; Ferreira, Sofia; Rodrigues, Carlos
	ID: 189 Results Of Monitoring Of Infection Caused By Group B Streptococcus In Newborn infants And Pregnant Women In 2012-2018 Years.	**Maliovanaya, Iryna Maliovanaya**
	ID: 212 Malaria Case Management in Sudan	**Salah, Elmuntasir**
	ID: 200 Understanding Factors associated with Parents' Decision to Vaccinate their Offspring with Recombinant Meningococcal Vaccines (MenB/MenC).	Riccò, Matteo; Vezzosi, Luigi; Gualerzi, Giovanni; **Signorelli, Carlo**

14:00-16:00 EARLY AFTERNOON SESSIONS

PEDIATRIC INFECTIOUS DISEASES - ADVANCES AND UPDATES

Hall: A+B

Moderator: JETHRO HERBERG

14:00-14:30	**Sepsis in 2018 – Theory vs. Practice**	NELLY NINIS General Paediatrician at St Mary's Hospital, London, part of Imperial College Healthcare NHS Trust, UNITED KINGDOM	**Learning Objectives:** (1) An understanding of what sepsis is. (2) The presentation of sepsis in various age groups. (3) The recognition of early sepsis. (4) Tools for the recognition of sepsis- usefulness and pitfalls. (5) Cognitive biases which prevent doctors from recognizing sepsis and how to avoid them.
14:30-15:00	**Meningococcal Disease in 2018**	SIMON KROLL Professor of Paediatrics and Molecular Infectious Diseases, Imperial College and St Mary's Hospital, Member of the Joint Committee on Vaccination and Immunisation, and Public Health England Meningococcus Forum, UNITED KINGDOM	**Learning Objectives:** (1) Understand challenges in the management of meningococcal infection, and the unique problems posed in many countries by meningococcus B and meningococcus W. (2) Review recent vaccine developments and their potential to prevent life-threatening infection. (3) Consider strategies to minimize the impact of meningococcal disease, combining public health intervention with actions to raise public and professional awareness of the earliest signs and symptoms of serious infection.
15:00-15:30	**Pneumococcal Conjugate Vaccines Update**	GEORGE SYROGIANNOPOULOS Professor and Chairman of Paediatrics at the University of Thessaly, School of Medicine in Larissa, GREECE	**Learning Objectives:** (1) Learn the remaining burden of pneumococcal invasive disease (2) Understand the extent of the reduction of pneumonia and otitis media in paediatric populations (3) Explore the differences in the impact of pneumococcal conjugate vaccines on public health among different countries (4) Evaluate the replacement phenomenon.
15:30-16:00	**Infectious Diseases, Decision Making in Acute Paediatrics**	DAMIAN ROLAND Consultant and Honorary Senior Lecturer in Paediatric Emergency Medicine, University of Leicester and Leicester Hospitals, UNITED KINGDOM	**Learning Objectives:** (1) Consider why errors are made in diagnosing serious infectious disease. (2) Review why cognitive errors occur. (3) Understand methods of training and education to improve staff performance.

16:30-18:30 AFTERNOON SESSIONS

PEDIATRIC INFECTIOUS DISEASES - ADVANCES AND UPDATES

Hall: A+B

Moderator: SIMON KROLL

16:30-17:00	**The Diagnosis and Management of the Encephalitic Child**	JETHRO HERBERG Clinical Senior Lecturer in Paediatric Infectious Diseases, Imperial College London, UNITED KINGDOM	**Learning Objectives:** (1) Understand the broad range of differential diagnoses. (2) Formulate an approach to initial diagnostic investigations, and to treatment
17:00-17:30	**Kawasaki Disease**		**Learning Objectives:** (1) Understand importance of early recognition and treatment. (2) Review options for primary and secondary treatment.
17:30-17:50	**The Future in the Prevention of Respiratory Syncytial Virus (RSV) Infections in Children**	CATHERINE WEIL-OLIVIER Honorary Professor of Pediatrics and Independent Expert, Paris VII University, FRANCE	**Learning Objectives:** (1) Understand the current prevalence on RSV infections during childhood. (2) Review the current and emerging options available for the prevention of RSV infections.
17:50-18:30	**Vaccine Hesitancy: A Growing Concern and the Power of the Patient Voice**	CATHERINE WEIL-OLIVIER Honorary Professor of Pediatrics and Independent Expert, Paris VII University, FRANCE ELENA MOYA Europe Africa Regional Coordinator - COMO, SPAIN	**Learning Objectives:** (1) Learn the key issues creating vaccine hesitancy today. (2) Explore the impact on public health worldwide. (3) Discover the power of the patient voice in a global context.

SPECIALTY TRACK 8

NUTRITION

DAY 2: Friday 7 December 2018

09:00-11:00 MORNING SESSIONS

NUTRITION - ADVANCES AND UPDATES

Hall: C+D

Moderator: MARK BEATTIE

09:00-09:40	**Human Milk Oligosaccharides**	YVAN VANDENPLAS Professor, Head of Department of Paediatrics, Universitair Ziekenhuis Brussels, BELGIUM	**Learning Objectives:** (1) What is known about the content of human milk oligosaccharides in mother's milk ? (2) What are the main functions of human milk oligosaccharides? (3) What are the results of clinical trials with HMOs in infant formula?
09:40-10:20	**Iron Deficiency in Children: Diagnosis, Neurological Impacts and Treatment**	COLIN MICHIE Consultant Paediatrician, American University of the Caribbean	**Learning Objectives:** (1) Recognise the high frequency of iron deficiency in children and its relevance to brain development and function. (2) Differentiate the relevance of iron deficiency among other nutritional conditions with similar impacts. (3) Assess the values and potential risks of different strategies of management of this common problem.
10:20-11:00	**Milk Fat Globule Membrane (MFGM) and the Neonatal Gut Microbiome and Intestinal Development**	ROY PHILIP Consultant Neonatologist & Adjunct Professor of Neonatology, University Maternity Hospital Limerick GEMS, University of Limerick, IRELAND	**Learning Objectives:** (1) Milk Fat Globule Membrane (MFGM) in Human Breast Milk. (2) Role of MFGM in neonatal nutrition and health. (3) Recent advances in MFGM, microbiota and microbiomics in neonatal nutrition.

11:00-13:00 NOON SESSIONS

NUTRITION - MASTERCLASS

Hall: C+D

11:00-13:00	**Nutrition and Management of Allergies from Infancy to Childhood**	LEANNE GOH Consultant in General Paediatrics and Paediatric Allergy University College London Hospital, UNITED KINGDOM	**PART 1 - The spectrum of allergic disease in childhood.** **Learning objectives:** (1) Overview of common allergic presentations. (2) Taking an allergy-focused history. (3) What are the common pitfalls?

11:00-13:00	**Nutrition and Management of Allergies from Infancy to Childhood**	SOPHIA KALLIS Specialist Paediatric Allergy Dietitian at University College London, UNITED KINGDOM	**Part 2 -Early life interventions for the prevention of food allergy.** **Learning objectives:** (1) What interventions can we try? (2) Evidence behind the interventions. (3) Current guidelines and practical aspects.
		PENNY SALT Pediatrician with Speciality Allergies, University College London, UNITED KINGDOM	**PART 3 - Is it Allergy?** **Learning objectives:** (1) Improving understanding of different types of food allergies in paediatric age groups. (2) Illustrating examples with real cases. (3) Putting learning into practice with audience participation.

14:00-16:00 EARLY AFTERNOON SESSIONS

NUTRITION - INTERACTIVE BRIEFING — Hall: Forum

14:00-15:00	**Nutrition in Inflammatory Bowel Disease**	MARK BEATTIE Consultant Paediatric Gastroenterologist, University Hospital Southampton. Editor in Chief of Archives of Disease in Childhood, BMJ Publishing Group. UNITED KINGDOM	**Learning Objectives:** (1) Understand the principles and management of nutritional problems in chronic disease. (2) Review recent research and clinical guidelines. (3) Consider the practicalities of nutritional management in children and young people with Inflammatory Bowel Disease.

NUTRITION - ORAL PRESENTATIONS — Hall: Forum

Moderator: MARK BEATTIE

15:00-16:00	**ID: 249** Does Breastfeeding, Milk Formula or Mixed Feeding during Maternity Stay Influence Neonatal Diet after Hospital Discharge?	**Pinheiro, Marta Isabel**; Ferreras, Cristina; Flor-De-Lima, Filipa; Silva, Maria Gorett; Santos Silva, Jorge; Guimarães, Hercília
	ID: 160 Nutritional Disorders in Children With Life-limiting Diseases in Developing Country	Riga, Olena; Trofimov, Ihor; **Kurilina, Tetiana**
	ID: 177 Provision of Early and High Amount of Parental Amino Acids to Low Birth Weight Neonated at ICU i	**Abusabika, Mohammed**
	ID: 255 Effects of Higher Protein Formula with Improved Fat Blend on Growth and Feeding Tolerance in Preterm Infants: a Double-Blind, Randomized, Controlled Clinical Trial	Thanh, Le Quang; **Chen, Yipu Monica**; Hartweg, Mickaël; Nguyen Thi, Tu Anh

16:30-17:30 AFTERNOON SESSIONS

NUTRITION - HOW TO... SESSIONS — Hall: Gracie

16:30-17:00	**How to Help your Patient Manage Anaphylaxis**	LEANNE GOH Consultant in General Paediatrics and Paediatric Allergy University College London Hospital, UNITED KINGDOM PENNY SALT Pediatrician with Speciality Allergies, University College London, UNITED KINGDOM	**Learning Objectives:** (1) Educating patients on how to recognise anaphylaxis. (2) Adrenaline autoinjector technique. (3) Written allergy action plans.
17:00-17:30	**How to Help your Patient Manage Eczema**		**Learning Objectives:** (1) Successfully avoiding triggers. (2) Bathing the child with eczema. (2) Effective application of emollients.

SPECIALTY TRACK 9

RESPIRATORY

DAY 2: Friday 7 December 2018

09:00-11:00 MORNING SESSIONS

PEDIATRIC RESPIRATORY - MASTERCLASS — Hall: Forum

09:00-11:00

Allergy Management

ADNAN CUSTOVIC
Clinical Professor of Paediatric Allergy
Imperial College London
Department of Paediatrics
St Mary's Campus Medical School, UNITED KINGDOM

PAUL TURNER
MRC Clinician Scientist in Paediatric Allergy & Immunology within the MRC & Asthma UK Centre in Allergic Mechanisms of Asthma at Imperial College London, UNITED KINGDOM

The Masterclass will cover:
PART 1 - Diagnosis of food allergy
PART 2 - Management of anaphylaxis
PART 3 - Food allergy prevention

Learning Objectives:

(1) Recognise the limitations of diagnostics with respect to food allergy. (2) Consider current controversies in the management of anaphylaxis, both in hospital and the community setting. (3) Review current approaches to primary prevention for food allergy.

11:00-13:00 NOON SESSIONS

PEDIATRIC RESPIRATORY - ADVANCES AND UPDATES — Hall: C+D

Moderators: CLAIRE HOGG & ANDREW BUSH

11:00-11:30

Personalised Therapies for Cystic Fibrosis: Treating the Basic Defect

RISHI PABARY
Consultant in Paediatric Respiratory Medicine, Royal Brompton Hospital, Honorary Clinical Senior Lecturer, Imperial College London, UNITED KINGDOM

Learning Objectives:

(1) Understand: Basic pathophysiology of cystic fibrosis and different mutation classes. (2) Review: Recent large RCTs of treatments targeting the underlying defect in CFTR. (3) Consider: New treatments in the pipeline.

11:30-12:00

The Myth of the Allergic March

ADNAN CUSTOVIC
Clinical Professor of Paediatric Allergy, Imperial College London, Department of Paediatrics, St Mary's Campus Medical School, UNITED KINGDOM

Learning Objectives:

(1) Consider evidence for the existence of atopic march. (2) Understand within-individual trajectories of eczema, asthma and rhinitis. (3)Consider mechanisms underpinning different clinical clusters of symptoms.

12:00-12:30

Primary Ciliary Dyskinesia (PCD) - When to Suspect, How to Diagnose, Recent Advances

CLAIRE HOGG
Professor of Practice, Paediatric Respiratory Medicine, Imperial College Clinical Director, Respiratory Paediatrics, Royal Brompton Hospital, UNITED KINGDOM

Learning Objectives:

(1) Recognise the cardinal signs that would point to a diagnosis of Primary Ciliary Dyskinesia. (2) Know how and where to refer patients to confirm or exclude a diagnosis of PCD. (3) Understand the rapidly developing field of advanced diagnostic techniques for PCD.

12:30-13:00

Peanut Allergy - No Longer a Life Sentence

PAUL TURNER
MRC Clinician Scientist in Paediatric Allergy & Immunology within the MRC & Asthma UK Centre in Allergic Mechanisms of Asthma at Imperial College London, UNITED KINGDOM

Learning Objectives:

(1) Understand the limitations of current management approaches for peanut allergy. (2) Review recent research into treatment options for peanut allergy. (3) Consider other interventions which can alleviate the burden of allergic disease in individuals with food allergy.

14:30-16:00 EARLY AFTERNOON SESSIONS

PEDIATRIC RESPIRATORY - MASTERCLASS — Hall: Euforia

14:30-16:00

Acute Respiratory Distress in Children- Differential Diagnosis and Therapeutic Management

ROLAND HENTSCHEL
Professor, Head of Division Neonatology/Pediatric Intensive Care, University Medical Center Freiburg GERMANY

TORSTEN UHLIG
Head of Department of Pediatrics, Klinikum Rosenheim & Lecturer in Pediatrics at LMU University Munich, GERMANY and Paracelsus University Salzburg, AUSTRIA

Learning Objectives:

(1) Understand and define the broad spectrum of diseases possibly leading to respiratory distress in children. (2) Understand the specific pathophysiology of different diagnoses. (3) Develop strategies for the diagnostic approach to the child with breathing difficulty based on algorithms. (4) Consider therapeutic strategies for disease-specific treatment based on the current literature. (5) Understand the basic concepts of ARDS therapy in childhood.

16:30-18:30 AFTERNOON SESSIONS

PEDIATRIC RESPIRATORY - ADVANCES AND UPDATES

Hall: C+D

Moderator: RISHI PABARY

16:30-17:00	**Exercise Induced Asthma; A Practical Approach to Diagnosis and Treatment**	ROBERT SALLIS Clinical Professor of Family Medicine, UC Riverside School of Medicine, USA, Co-Director, Sports Medicine Fellowship, Kaiser Permanente, Chair, Exercise is Medicine, USA	**Learning Objectives:** (1) Identify the symptoms of EIA. (2) Preform appropriate exam and testing for EIA. (3) Develop a custom treatment for each patient with EIA.
17:00-17:30	**Rising Cost of New Medicines - What are the Ethics?**	ANDREW BUSH Professor of Paediatrics and Head of Section (Paediatrics), Imperial College, Professor of Paediatric Respirology, National Heart and Lung Institute, UNITED KINGDOM	**Learning Objectives:** (1) Understand the nature of the spiralling costs of in particular novel biological. (2) Realise how unsatisfactory our present strategies are for dealing with the expectations of patients for these medications. (3) Consider better ways of getting the benefits of these medications at an appropriate cost.

PEDIATRIC RESPIRATORY - ORAL PRESENTATIONS

Hall: C+D

Moderator: RISHI PABARY

17:30-18:30	**ID: 136** Surveillance of Inhaled Steroids (IS) in children : the REDS (REspiratory Drugs Survey) Study	**Napoleone, Ettore**; Lavalle, Antonella; Scasserra, Cristiana; Ricci, Moreno
	ID: 119 Comparing Efficacy Of A Novel Foot Operated Resuscitator Versus Bag And Mask Ventilation In A Manikin.	Patel, Vishwa Tushar; Nimbalkar, Somashekhar Marutirao; **Shah, Binoy Viresh**; Amin, Amee Atulkumar; Phatak, Ajay Gajanan
	ID: 141 Effect of a Family Empowerment Program on Coping with Stress, Problem Solving in Parents, and Quality of Life in Children with Cystic Fibrosis: Randomized Controlled Trial	Donmez, Hatice; **Tas Arslan, Fatma**
	ID: 279 Mycoplasma Pneumoniae Infection: Polymerase Chain Reaction Detection In Symptomatic Children And Adolescents	**Silva, Joana Brandão**; Reis, Joana; Barbosa, Luciana; Carvalho, Isabel
	ID: 247 Cow's Milk Protein Allergy In The Newborn: Challenges Concerning Diagnosis And Management In Clinical Practice	**Fonseca, Sara**; Matias, Mafalda; Cunha, Margarida; Monteiro, Isis; Pignatelli, Diana
	ID: 196 Increased Total Serum Immunoglobulin E In Children Developing Mycoplasma Pneumoniae-related Extra-pulmonary Diseases.	**Poddighe, Dimitri**; Bruni, Paola; Comi, Elena Virginia; Marseglia, Gian Luigi
	ID: 293 Recording and Investigation of the Annual Incidence of the Respiratory Infections which were found under the Tongue, of the Hospitalised Children in a General Hospital (2017), according to the Demographic and Other Factors.	**Anastasiou-Katsiardani, Anastasia**; Svolou, Stauroula; Diamanti, Miranda; Moustaka, Eugenia; Gakikou, Stavroula; Papakyritsi, Dimitra; Apostolou, Maria-Ioanna; Tsakos, Konstantinos; Papathanassiou, Ioanna; Psirropoulou, Anna; Lampri, Maria; Tanou, Kalliopi

GENERAL PEDIATRICS

DAY 1: Thursday 6 December 2018

GENERAL PEDIATRICS - ORAL PRESENTATIONS - PART 1

Hall: Harmonie

Moderator: TERENCE STEPHENSON

09:45-11:00	**ID: 190** Comparison of Respiratory Parameters and Functional Capacity of Two Cases Using Cochlear İmplant and Hearing Aid	**Tuncer, Deniz**; Gurses, Hulya Nilgun
	ID: 180 Demographic and Bio-profile of Children with Down Syndrome from an Urban Tertiary Care Hospital in India	**Thakkar, Mehul Shailesh**; Venkatesh, Sumitra; Bhagwat, Shubhada
	ID: 199 Pediatricians' Perspectives on Social History: A Qualitative Study	**Firat, Merve Çiçek**; Yalçin, Siddika Songül

	ID: 144 Psychometrıc Properties Of The Turkısh Versıon Of The Parent Perception Of Uncertainty Scale (PPUS) Among Parents Of Hospitalized Children	**Özkan, Sevil**; Taş Arslan, Fatma
	ID: 221 Role of Viral Pathogen in Hospitalized Children with Community Acquired Pneumonia in Qatar	**Hassan, Manasik Kamil**; Al-Naimi, Amal; Varughese, Aji; Youssef, Magda; Alhammadi, Ahmed
	ID: 120 Supplementing Young Infants with Herbal Drinks: An Experience From The State Of Qatar	**Wassef, Reem Emad El-Deen**; Elghawaby, Ahmed Essam; Afyouni, Houda; Marmar, Rufayda; Alamri, Mohamed; Hendaus, Mohamed

GENERAL PEDIATRICS - ORAL PRESENTATIONS - PART 2

Hall: Forum

Moderator: JOAN-CARLES SURIS

11:00-13:00	**ID: 181** Validating process of an Electronic Integrated Text, Visual and Audio Questionnaire (EITVAQ) to assess quality of life among children with hydrocephalus	**Tan, Joy Ewenn**; Nicholson, Alf; Caird, John
	ID: 123 The Potential Importance Of Hypercobalaminemia As A Possible Early Marker In The Working Diagnosis Of Malignancy And Blood Disorders	**Deyab, Abdou Shafik**
	ID: 260 Vaccination: Attitudes And Practices of Lebanese Pediatricians in Their Clinics	**Fadous Khalife, Marie Claude J.**; Alojaimi, Mode N.; Khalife, Yaacoub R.; Menassa, Juliana J.; Makhoul, Kevin G.; Koeck, Jean Louis
	ID: 226 Vaccination From The Point Of View Of Students Of Medicine: Do We Need To Change The Curriculum Of Undergraduate Courses In Vaccinology?	**Bralić, Irena**; Kragić, Katija; Kragić, Ante
	ID: 188 Assessment Of Pain And Adequacy Of Pain Management In The Pediatric Emergency Settings	**Ganzijeva, Kristina**; Kinderevičiūtė, Ieva; Jankauskaitė, Lina; Dagys, Algirdas
	ID: 229 Big Bites And Pearly Whites: A Public Health Initiative To Improve Children's Oral Health In North-West London.	**Amamilo, Ifeyinwa Blessing**; Palit, Vikram; Al-Jaddir, Ghaida
	ID: 169 Clinical,Biochemical And Etiological Profile Of Viral Fulminant Hepatic Failure	Bhat, Deepak; **Singh, Yadvinder**
	ID: 182 Closed Neural Tube Defects In Neonates And Infants: The Experience Of An Academic Hospital	**Moita, Rita**; Flor De Lima, Filipa; Martins, Angelina; Rodrigues, Manuela; Pinto, Daniela; Guerra, Conceição; Silva, Gorett; Guimarães, Hercília

DAY 2: Friday 7 December 2018

GENERAL PEDIATRICS - HOW TO... SESSIONS

Hall: Gracie

17:30-18:00	**The Preparticipation Physical Exam**	ROBERT SALLIS Clinical Professor of Family Medicine, UC Riverside School of Medicine, USA, Co-Director, Sports Medicine Fellowship, Kaiser Permanente, Chair, Exercise is Medicine, USA	**Learning Objectives:** (1) Define the key components of the PPE. (2) Recognise key findings on exam that warrant further evaluation. (3) Decide on clearance vs disqualification for conditions commonly uncovered in the PPE
18:00-18:30	**Common Face and Eye Injuries**		**Learning Objectives:** (1) Recognise common facial injuries encountered in kids. (2) Perform appropriate examination and imaging in kids with facial injury. (3) Decide on return to activity or sports after a facial injury.

NEONATOLOGY

DAY 3: Saturday 8 December 2018

NEONATOLOGY - ORAL PRESENTATIONS

Hall: Forum

Moderator: ROY PHILIP

09:30-11:30	**ID: 151** Age estimation for refugee children in Malaysia based on dental development: a case series analysis.	**Jayaraman, Jayakumar**; Nambiar, Phrabhakaran
	ID: 236 Cardiac Function In Small For Gestational Age Infants	**Ichihashi, Ko**; Sato, Hiroaki; Sugiyama, Youhei; Maruyama, Asami
	ID: 156 Diagnostic Test of Acute Kidney Injury Using Cystatin C Compared to Serum Creatinine in Critically Ill Neonates	**Utami, Meita Dwi**; Hidayati, Eka Laksmi; Tridjaja, Bambang; Rohsiswatmo, Rinawati; Djer, Mulyadi M; Prawitasari, Titis; Sjakti, Hikari Ambara
	ID: 134 Effect of Education Given on Practices Supportive Oral Feeding to Health Care Professionals in NICU	**Çelen, Raziye**; Taş Arslan, Fatma; Soylu, Hanifi
	ID: 150 Evaluate Of Maternal- Baby Attachment Level Of Mothers Applied To Primary Health Care Center	**Özdemir, Hazal**; Taş Arslan, Fatma
	ID: 231 Immunization Status Of Newborns In General Hospital Kumanovo During The Period 2014-2017	**Hristova, Aleksandra**; Tavchioska, Gabriela
	ID: 161 Improving the use of sucrose as analgesia in the Neonatal Unit, Wishaw Hospital	**Brara, Amrita**; Fisher, Hazel; Mcgrory, Lorraine
	ID: 233 Late Preterm: a big challenge	**Ferreras, Cristina**; Pinheiro, Marta Isabel; Martins, Angelina; Rodrigues, Manuela; Silva, Goretti; Guimarães, Hercília
	ID: 205 Newborn In The Emergency Department	**Almeida, Nuno Serra De**; Martins, Filipa; Ferreira, Mariana; Rodrigues, Jorge; Loureiro, Susana; Santos, Elisabete; Baptista, Cristina

SPOT THE EARLY SIGNS

DAY 3: Saturday 8 December 2018

HOW TO DETECT EARLY, DIAGNOSE AND REFER PATIENTS WITH SERIOUS CONDITIONS

Hall: A+B+C

Moderator: JOAN-CARLES SURIS

09:30-10:10	**Spotting the Signs of the Non-inflammatory Causes of Joint Swelling - What the Paediatrician and Paediatric Rheumatologist Need to Look for.**	ROLANDO CIMAZ Head of the Pediatric Rheumatology Unit, Meyer Children's Hospital in Florence, and Associate Professor of Pediatrics at the University of Florence, ITALY	**Learning Objectives:** (1) Understand what should and should not be sent to a rheumatologist. (2) Review the main causes of pain in adolescents, ie hypermobility syndrome. (3) Consider the main steps to go in the differential diagnosis of a possible rheumatological condition.
10:10-10:50	**Spotting the Early Signs: Osteogenesis Imperfecta (OI) in Children - Reasons , Diagnostics and Treatment Available**	NATALIA BELOVA Head of the Center of Inborn Pathology in GMS Clinic, Moscow, Member of MAB of OIFE (OI Foundation of Europe), RUSSIA	**Learning Objectives:** (1) Provide pediatricians and pediatric endocrinologists with a better understanding of the clinical features of different forms of OI and similar disorders. (2) An overview on the latest information about diagnostic and treatment of OI. (3) Inform pediatricians about common mistakes in management of OI and how to avoid them.
10:50-11:30	**When Symptoms Indicate a Possible Endocrine Condition. Does every short child require a proper sub-specialist referral?**	ALAN. D. ROGOL Professor Emeritus, (Pediatrics and Pharmacology), University of Virginia, USA	**Learning Objectives:** (1) Understand the range of normal growth during infancy, childhood and adolescence. (2) Understand how various medical conditions can affect growth. (3) Use the growth data, along with history, physical examination and preliminary laboratory and imaging data to select proper referral to a pediatric sub-specialist.

PROFESSIONAL DEVELOPMENT

DAY 2: Friday 7 December 2018

WORKSHOP 1 — Hall: Gracie

09:00-11:00

Leadership - Part 1 - Leadership and Team Development

DOUG PARKIN
Programme Director, Advance HE, UNITED KINGDOM.

There is nothing greater than great leadership, not for what it is in itself but for what it enables others to achieve, create and become.

This session will be an opportunity to develop your understanding of leadership, particularly team leadership and team development. It will encourage you to consider afresh the question "what sort of leader do I want to be?" and to explore this through some contemporary perspectives such as transformational leadership and collective leadership. Within this we will consider the characteristics of high-performing teams and the leader's role in supporting teams to develop and flourish.

Learning Objectives:

This session will explore: (1) What sort of leader do you want to be? (2) What are your strengths, passions, blind spots and aspirations for development? (3) What are the characteristics of both high performing and dysfunctional teams? (4) How can you promote and empower collaborative teamwork?

WORKSHOP 2 — Hall: Gracie

11:00-12:00

Publishing Advice for Healthcare Professionals - Getting Research Published

MARK BEATTIE
Professor, Consultant Paediatric Gastroenterologist, University Hospital Southampton, UNITED KINGDOM

Learning Objectives:

(1) Discuss the process by which journals select papers for publication. (2) Discuss how to write for the reader - getting your message across. (3) Participate in a 'mock' editorial committee selecting papers for publication.

WORKSHOP 3 — Hall: Gracie

12:00-13:00

Social Media: Knowledge Translation in the 21st Century

DAMIAN ROLAND
Consultant and Honorary Senior Lecturer in Paediatric Emergency Medicine, University of Leicester and Leicester Hospitals, UNITED KINGDOM

Learning Objectives:

(1) Understand terminology around digital learning and the use of social media. (2) Review evidence on the impact of social media on knowledge translation. (3) Consider your own strategies of utilising social media to aid your own practice.

WORKSHOP 4 — Hall: Gracie

14:00-15:00

How to write your CV, Grant Applications and Papers

ANDREW BUSH
Professor of Paediatrics and Head of Section (Paediatrics), Imperial College, Professor of Paediatric Respirology, National Heart and Lung Institute, UNITED KINGDOM

Learning Objectives:

(1) Work out how ensure their CV maximises their chance of getting shortlisted and appointed to various different positions. (2) Avoid killing their manuscript before it starts by understanding the common traps into which junior authors fall. (3) Understand the differences between writing papers and grants, and how to maximise the chances of a successful grant application.

WORKSHOP 5 — Hall: Gracie

15:00-16:00

Interactive Workshop: Everything possible MUST BE DONE for my child – When Professionals and Carers Disagree

ANDREW BUSH
Professor of Paediatrics and Head of Section (Paediatrics), Imperial College, Professor of Paediatric Respirology, National Heart and Lung Institute, UNITED KINGDOM

Learning Objectives:

(1) Work out how ensure their CV maximises their chance of getting shortlisted and appointed to various different positions. (2) Avoid killing their manuscript before it starts by understanding the common traps into which junior authors fall. (3) Understand the differences between writing papers and grants, and how to maximise the chances of a successful grant application.

WORKSHOP 6

Hall: Euforia

16:30-18:30

Presentation Skills for Healthcare Professionals Workshop

DOUG PARKIN
Programme Director, Advance HE, UNITED KINGDOM.

You can lecture an audience to knowledge (sometimes), but you must inspire it to think! This highly engaging and practical session will help you to speak so that others want to listen and to prepare and deliver presentations that get your message across with energy and confidence. Whether presenting to a large audience, sitting around a table or to a group of colleagues, the ideas and techniques covered in this session will help you to use these opportunities to make a powerful and memorable impact.

Learning Objectives:

This session will help you explore how to: (1) Speak to groups with confidence, professionalism and commitment. (2) Define the purpose and objectives of a presentation, anticipate the needs of the audience, and develop a simple and effective structure. (3) Communicate a clear message, project enthusiasm and maintain interest. (4) Manage nervousness and other negative pre-presentation feelings. (5) Begin and end a presentation with impact and authority.

DAY 3: Saturday 8 December 2018

WORKSHOP 7

Hall: Gracie

09:30-11:30

Leadership - Part 2 - Leading Change in a Complex Environment

DOUG PARKIN
Programme Director, Advance HE, UNITED KINGDOM.

"Today, the most important question for any organization is this: are we changing as fast as the world around us?"(Gary Hamel, 2012, What Matters Now).

Gary Hamel's insightful quote is as important for healthcare organisations as for any other large public or corporate organisation. And where there is high complexity, whether arising from user needs, service enhancement and diversification, or external expectations the uncertainties about change become magnified.

This session will be an opportunity to explore the drivers for change that are most critical in your context and their implications for you as a leader. It will also stimulate discussion and ideas about creating collective commitment around the need for change and building a sense of shared purpose and mutual accountability.

Learning Objectives:

This session will explore: (1) What are the drivers for change surrounding the context in which you lead? (2) How can you inspire collective commitment around the need for change? (3) What do we understand by user-centred change and what are the values associated with this? (4) What is the relationship between culture, strategy and change?

Poster Viewing 1

13:00-14:00 - Lunchtime Viewing Groups & Guided Tours - Outside Halls A+B+C+D, Groups 1, 2 , 3, 4

Moderators: JOAN-CARLES SURIS, CHRISTINA AKRE, RICHARD BELANGER & YARA BARRENSE-DIAS. (See details on page 21)

DAY 1: Thursday 6 December 2018

1	ID: 250	An African child's tale of Toxic Epidermal Necrolysis	**Vieira Martins, Miguel**; Fonseca, Maura; Chavez, Glenda; Sousa, Suasilanne; Sousa Pontes, Feliciana
2	ID: 261	A case of Catastrophic Anti-phospholipid Syndrome in previously healthy 14 years old Emirati male	**Al Jaberi, Fatima Salem**
3	ID: 213	A tender migratory rash - Sweet Syndrome in a Paediatric Patient	**Petrakis, Nikki**; Adib, Navid; Yiallourides, Michalis
4	ID: 140	Nutritional Disorders and It`s Correction in Children With Juvenile Idiopathic Arthritis (JIA)	**Krasnopolskaya, Anna**; Balykova, Larisa; Akashkina, Ekaterina; Soldatov, Oleg
5	ID: 168	Chronic Abdominal Pain – Be Sure Not To Overlook The Rare Causes	Coroleuca, Alexandra; Smadeanu, Roxana; Balanescu, Laura; Dragan, Gabriel; Pacurar, Daniela; Becheanu, Cristina Adriana; **Vlad, Raluca Maria**; Lesanu, Gabriela
6	ID: 230	A Case Of Iron-Deficiency Anemia And Pica: What Happened First?	**Silva, Joana Brandão**; Cordeiro, Márcia; Borges, Sandra; Costa, Cristina; Pinto, Rui
7	ID: 126	Central Nervous System Infection By Listeria monocytogenes In One Patient Under Steroids Treatment	**Gomes, Sílvia A.**; Silva, Tiago; Gouveia, Catarina; Vieira, José Pedro; Brito, Maria João
8	ID: 179	Deficient Expression Of Gene, Immune Mediators, Neurotransmitters And Behaviors From Newborn To Adolescence Using Observation By Maternal Immune Activation Offspring Model	**Chen, Ya-Lei**
9	ID: 234	Effect Of One Session Whole Body Vibration On Respiratory Muscle Strength In A Child With Polyneuropathy	**Durgut, Elif**; Denizoglu Külli, Hilal; Alpay, Kübra; Zeren, Melih; Gürses, Hülya Nilgün
10	ID: 277	Intellectual Disability and Development Delay in Children - Looking for a Cause	**Formiga, Adriana**; Azevedo, Isabel; Mesquita, Sandra; Jorge, Arminda; Carvalho, Cristiana; Rodrigues, Carlos
11	ID: 263	Management of Childhood Epilepsies with non Adequate Seizure Control by AEDs	**Globa, Oksana V.**; Kuzenkova, Liudmila M.; Podkletnova, Tatiana V.; Zhourkova, Natalya V.; Savost'yanov, Kirill V.; Pushkov, Aleksander
12	ID: 171	Recurrent Febrile Seizures – Doose Syndrome	**Castañeda-Ramirez**, Laura E
13	ID: 194	The Concept Of Self-reference In Autism	**Megremi, Amalia**; Darzentas, John
14	ID: 289	Adolescent-Focused Human Centred Design: A Tool for Meaningful Engagement of Young People in Health Research, Program Planning and Evaluation.	**Davison, Colleen**; Michaelson, Valerie
15	ID: 166	Anorexia Nervosa And The Silent Heart Injury	**Ortigado, Alfonso**; Martín, Francisco José; Galicia, Gonzalo; Sevilla, Pilar; Miras, Isabel; Montes, Laura
16	ID: 183	Arterial Hypertension in Adolescents – Factors of Progression and Stabilization	Yakovleva, Inna
17	ID: 253	Cannabis Use during Adolescence: An Overview in Luxembourg and in Comparison to other European Countries	**Catunda, Carolina**; Heinz, Andreas; van Duin, Claire; Willems, Helmut

18	ID: 267	Communication with father and psychosomatic complaints among adolescents: Results from Armenian Health Behaviour in School-aged Children (HBSC) 2013/2014 Survey.	**Melkumova, Marina**; Movsesyan, Yeva; Sargsyan, Sergey
19	ID: 246	Negative Health Consequences of Social Media Abuse in the Context of the Quality of Social Relations	**Mazur, Joanna**; Dzielska, Anna; Kleszczewska, Dorota; Oblacinska, Anna; Malkowska-Szkutnik, Agnieszka
20	ID: 191	Prevalence and Association of Depressive Symptoms with the Consumption of Analgesics among Adolescents	**Hena, Momota**; Leung, Cherry; Clausson, Eva K; Garmy, Pernilla
21	ID: 165	Prevalence of Overweight and Obesity in Healthy Bulgarian Children and its Impact on Lung Function Parameters	**Mandadzhieva, Stoilka Koleva**; Marinov, Blagoi Ivanov; Kostianev, Stefan Stoilov
22	ID: 245	Social Media Use and Physical Appereance Social Comparison and Their Relation with Body Image in Adolescence.	**Dzielska, Anna Maria**; Mazur, Joanna; Oblacińska, Anna; Kleszczewska, Dorota; Malkowska-Szkutnik, Agnieszka
23	ID: 242	Stress As A Mediator Of The Relationship Between Physical Activity And The Subjective Complaints In Adolescence	**Kleszczewska, Dorota Wiktoria**; Dzielska, Anna; Mazur, Joanna
24	ID: 265	Three Cases Of Hypokalemic Periodic Paralysis	**Moita, Rita**; Rocha, Ruben; Barreira, João Luís
25	ID: 172	A Rare Cause Of Upper Gastrointestinal Tract Obstruction In A Patient With Marfanoid Phenotype	**Brezeanu, Livia Elena**; **Guta, Oana Maria**; Vlad, Raluca; Nidelcu, Anatolie; Pacurar, Daniela
26	ID: 214	A Rare Clinical Feature of Henoch Schonlein Purpura (HSP)	**Ratcliffe, Anna Marion**; Kallappa, Chetena
27	ID: 210	An Atypical Presentation Of Spontaneous Pneumomediastinum	**Rodrigues, Jorge**; Monteiro Costa, Raquel; Magalhães, Joana; Santos, Elisabete; Faria, Cristina
28	ID: 224	Assessing Implementation of the ISBAR3 Clinical Handover Tool in an Irish Tertiary Paediatric Hospital : Student Perspective	**Sheil, James Charles**; Doolan, Aoife; Hussain, Mohammad; Williams, Patrick Aidan; Corcoran, Gearoid; Tan, Joy; Nicholson, Alf
29	ID: 143	Care Burden for Adolescent Whose Family Members Need Palliative Care: Nursing Students' Opinion	**Özkan, Sevil**; Taş Arslan, Fatma
30	ID: 256	Cogan´s Syndrome – A case report	**Leite, Ana Margarida**; Branco, Tiago; Pimenta, Sofia; Soares, Joana; Fernandes, Conceição; Fraga, Carla; Oliveira, Natália; Marinho, António; Lira, Sónia
31	ID: 195	Down's Syndrome: Follow Up In A Portuguese Hospital	**Adrião, Mariana**; Pereira, Nuno Miguel; Guardiano, Micaela; Maia, Ana
32	ID: 176	Esophageal Stenosis in a Child Caused by Cytomegalovirus Infection	Bulegenova, Minira; **Bekisheva, Aigul**; Makhneva, Anna
33	ID: 142	Fathers' Infant Attachment Status and Related Factors	Turk Dudukcu, Figen; **Tas Arslan, Fatma**
34	ID: 266	Group B Streptococcus Parotitis In Little Infant	**Soares, Joana Margarida Coelho**; Pimenta, Sofia; Leite, Ana Margarida; Machado, Ângela; Brandão, Carla; Monteiro, Cláudia; Cunha, Joaquim
35	ID: 109	Assessment of the Nutritional Status of Primary School Children in Fako Division, South West Region, Cameroon.	**Hildegarde, Nvonako Tsasse**; Koki, Paul; Mbuagbaw, Lawrence
36	ID: 296	Gender And The 10-13-Year-Old Walk Pattern	**Smola, Eliza**; Jankowicz-Szymanska, Agnieszka; Wodka, Katarzyna; Bibro, Marta
37	ID: 295	The Influence Of Excessive Body Weight In Children On The Range And Symmetry Of Pelvic Movement In A Walk	**Jankowicz-Szymanska, Agnieszka**; Smoła, Eliza; Mikołajczyk, Edyta

Poster Viewing 2

13:00-14:00 - Lunchtime Viewing Groups & Guided Tours - Outside Halls A+B+C+D, Groups 1, 2 , 3, 4

Moderators: JOAN-CARLES SURIS, CHRISTINA AKRE, RICHARD BELANGER & YARA BARRENSE-DIAS. (See details on page 21)

DAY 2: Friday 7 December 2018

1	ID: 147	Antioxidants in Correction of Autonomic Cardioneuropathy in Children and Adolescents with Diabetes Mellitus	**Balykova, Larisa**; Samoshkina, Elena; Soldatov, Yuriy; Zolnikova, Tatiana
2	ID: 273	Genetic Analysis Of TPO Gene In Children With Permanent Congenital Hypothyroidism Suspected Dyshormonogenesis	**Leite, Sara Silva**; Freitas, Joana; Oliveira, Maria João; Borges, Teresa
3	ID: 158	Low Level Of Vitamin D Increases The Risk Of Low Energy Fractures In Children.	**Nicolas, Georges**; Hoyek, Fady; Assaf, Elias; Akiki, Simon
4	ID: 185	Primary Hypothyroidism In Children: Unusual Clinical Presentation	**Soh, Ser Yee**; Vasanwala, Rashida Farhad
5	ID: 243	A Case of Pulmonary Tuberculosis Presenting As Lobar Pneumonia	**Barreto Mota, Ricardo**; Pimenta, Sofia; Ferraz de Liz, Catarina; Rodrigues, Joana; Ribeiro, Maria do Céu; Brandão, Carla; Vieira, Lucília; Carvalho, Isabel; A. Barbosa, Rosa
6	ID: 294	Case Description of Kawasaki Disease in a Toddler following Vvaccination against Meningitis B (BEXSERO®)	**Anastasiou-Katsiardani, Anastasia**; Papakyritsi, Dimitra; Psiropoulou, Anna; Tanou, Kalliopi; Lampri, Maria; Tsakos, Konstantinos; Apostolou, Maria-Ioanna; Margaritopoulou, Vasiliki; Papathanasiou, Ioanna
7	ID: 264	Cerebral Malaria: The Reality Of An Endemic And Underdeveloped Country	**Gorito, Vanessa Oliveira**; Pinheiro, Marta Isabel; Guambé, Lúcia; Rego, Dalila; Gonçalves, Paula; Duarte, Natércia
8	ID: 202	Febrile Splenomegaly: Presentation of Two Cases	**Tavchioska, Gabriela**; Hristova, Aleksandra
9	ID: 272	Meningococcal Disease Caused By Neisseria Meningitis Serogroup B- A Case Report	**Pimenta, Sofia**; Soares, Joana; Barreto Mota, Ricardo; Leite, Ana Margarida; Matos, Joana; Ribeiro, Maria do Céu; Reis, Ana; Rodrigues, Joana; A. Barbosa, Rosa; Mendes, Catarina; Brandão, Carla
10	ID: 281	Multifocal Chronic Osteomyelitis to Multiresistant Serratia marcescens and Bone Tuberculosis in Sickle Cell Disease	**Carvalho, Ana Araújo**; Gouveia, Catarina; Silva, Tiago Milheiro; Ramos, Susana; Candeias, Flora; Brito, Maria João
11	ID: 284	Relapsing Orbital Myositis and Streptococcal Infection	**Martins, Inês Fidalgo**; Vieira, José Pedro; Ramos, Margarida; Brito, Maria João
12	ID: 235	Renal Nodular Lesion In Newborn: Xanthogranulomatous Pyelonephritis	**Gomes, Sara Madureira**; Morais, Catarina; Fragoso, Ana Catarina; Jardim, Joana; Barreira, João Luís; Carvalho, Irene; Pinto, Helena
13	ID: 244	Effect Of Preoperative Nutritional Status On Postoperative Outcomes In Children With Congenital Heart Diseases Undergoing Surgical Repair In a Tertiary Healthcare Center In Lebanon	**Yaacoub, Christelle**; Arabi, Mariam; Assi, Jana; Bitar, Fadi; Yazbeck, Nadine
14	ID: 217	High-protein Diet In Hepatic Lipid Accumulation Management of Non-alcoholic Fatty Liver Disease. A Literature Review.	**Nguyen, Anh Hoang**
15	ID: 137	Practical Approach for Nutritional Support of Orphan Children with Larsen Syndrome and Severe Nutrition Deficit (Case Management)	**Kurilina, Tetiana**; Marushko, Tetiana; Hliadielova, Nataliia; Pysariev, Andrii; Riga, Olena; Kozachuk, Valentina; Korneva, Valentina
16	ID: 193	Successful Adaptation of “MyPlate” Method for Improving the Quality of Mid-day Meal of Pre-schoolers in Suburban Sri Lanka	**Rodrigo, Ishani Dushmanthi**; Dias, Kalani; Rathnayake, Gayan; Thilakarathne, Roshini; Shobowale, Esther; De Silva, Lakshani; Indika, Viraj; Vidanage, Dinithi

17	ID: 112	A Twelve Year-old Asymptomatic Child With Pulmonary Inflammatory Myofibroblastic Tumor	Karalexi, Maria; Priftis, Konstantinos; Douros, Konstantinos; Galani, Angeliki; Vaos, Georgios; Zavras, Nikolaos; Alexopoulou, Efi; Kapetanakis, Emmanouil; Tomos, Periklis; Papaevangelou, Vassiliki
18	ID: 291	Cytomegalovirus Infection: A Case Report	**Santos, Ana Luísa**; Silva, Sónia; Rosário, Marta; Dias, Ângela; Guedes Vaz, Luísa
19	ID: 175	Effect Of Probiotic Supplementation (Lactobacillus Reuteri) In Patients With Cystic Fibrosis (CF)	**Jakjovska, Tatjana**
20	ID: 283	Non-Cystic Fibrosis Bronchiectasis in Childhood: Clinical features, Etiology and Outcome	**Silva, Sónia**; Rosário, Marta; Santos, Ana Luísa; Guedes Vaz, Luísa
21	ID: 152	Two Years Follow Up of Hyperimmunoglobulin E Syndrome With Giant Bullae of The Lung: A Case Report From Indonesia	**Utami, Meita Dwi**; Kurniati, Nia; Gunardi, Hartono
22	ID: 209	Feeding Difficulties And Laryngomalacia Caused By A Thoracic Surprise	**Perceval, Celine**; De Bisschop, Barbara
23	ID: 155	Investigate The Maternal-Baby Attachment And The Factors That Affect The Maternal-Baby Attachment	**Özdemir, Hazal**; Taş Arslan, Fatma
24	ID: 287	Necrotizing Enterocolitis In Term Neonates: Identifying Risk Factors And Predictors Of Severity	**Teles-Silva, Cláudia**; Martins, Francisca; Flor-De-Lima, Filipa; Soares, Henrique; Silva, Carmen; Fragoso, Ana Catarina; Guimarães, Hercília
25	ID: 204	Neonatal Hypernatremia: A Year-Long Analysis	**Almeida, Nuno Serra de**; Rodrigues, Jorge; Ferreira, Mariana; Loureiro, Susana; Figueiredo, Cecília; Andrade, Nuno; Simões, Fátima
26	ID: 157	Perinatal Factors That Affect On The Development Of RDS In Late Preterm Infants	**Pysariev, Andrii**; Shunko, Yelyzaveta; Sirenko, Oksana
27	ID: 222	Rate Of Premature Newborns In General Hospital Kumanovo During The Period 2014-2017	**Hristova, Aleksandra**; Tavchioska, Gabriela
28	ID: 135	Health Literacy Level of Mothers and Rational Use of Antibiotics in Children	**Çelen, Raziye**; Taş Arslan, Fatma
29	ID: 115	Myeloid Sarcoma Presenting As Irritability And Mild Proptosis In a 6-Month Infant: A Case Report	**Diaz, Erika Alejandra**; Vargas, Gabriel; Uribe, Leslie; Rivera-Ortegón, Francisco
30	ID: 187	Paediatric Registrar Review Clinic: Improving Efficiency and Attendance	**Lim, Chun**; D Chesover, Alexander; Ingram, Anne
31	ID: 223	Precision entails Perfection: Blood Forms Completion - Where are we now?	Farina, Sofia; Al Zadjali, Mathani; Muser, Inga; Tyrell, Oisin; **Tan, Joy Ewenn**; Desembrana, Gift; Nicholson, Alf
32	ID: 131	Progressive Chronic Kidney Disease as a Complication of Neurogenic Bladder in Spina Bifida: a Case Report	**Harjaningrum, Agnes Tri**; Trihono, Partini Pudjiastuti
33	ID: 227	Strengthening of Health Care Capacities to improve Early Childhood Development in Serbia - Results and Plans	**Lozanović, Dragana**, Vitomir,; Bogdanovic, Radovan, Milos; Milidrag, Marica; Jovanovic, Ljiljana Sokal
34	ID: 111	The Role Of Neutrophil-lymphocyte Ratio And Mean Platelet Volume In Diagnostics And Prediction Of Bacteremia In Pediatric Emergency Department Settings	**Zebelyte, Gineta**; Tamelyte, Emilija; Lapinskas, Tomas; Jankauskaite, Lina
35	ID: 198	Urachal Anomalies – Case Report and Literature Review	**Rey y Formoso, Vicente**; Gonçalo, Ana Lia; Vasconcelos Castro, Sofia; Garcia Fernandez, Maria
36	ID: 108	Effectiveness of a School-based Intervention on Teacher Confidence in Asthma Management.	**Reznik, Marina;** Ozuah, Philip O.
37	ID: 297	The Problem Of Abnormal Body Weight In Children From The Point Of View Of A School Nurse	**Kołpa, Małgorzata**

3rd LIFECOURSE IMMUNISATION FOCUS GROUP - INCREASING VACCINATION RATES ACROSS EUROPE

3rd European Life Course Immunisation Focus Group
After the very successful 2016 and 2017 Life Course Immunisation Focus Group at the Excellence in Paediatrics Conference in London and Vienna, EIP are once again delighted to be collaborating with the Coalition for Life Course Immunisation (CLCI), the Confederation of Meningitis Organisations (CoMO), and a host of partners for the 3rd Life Course Immunisation Focus Group in Prague.

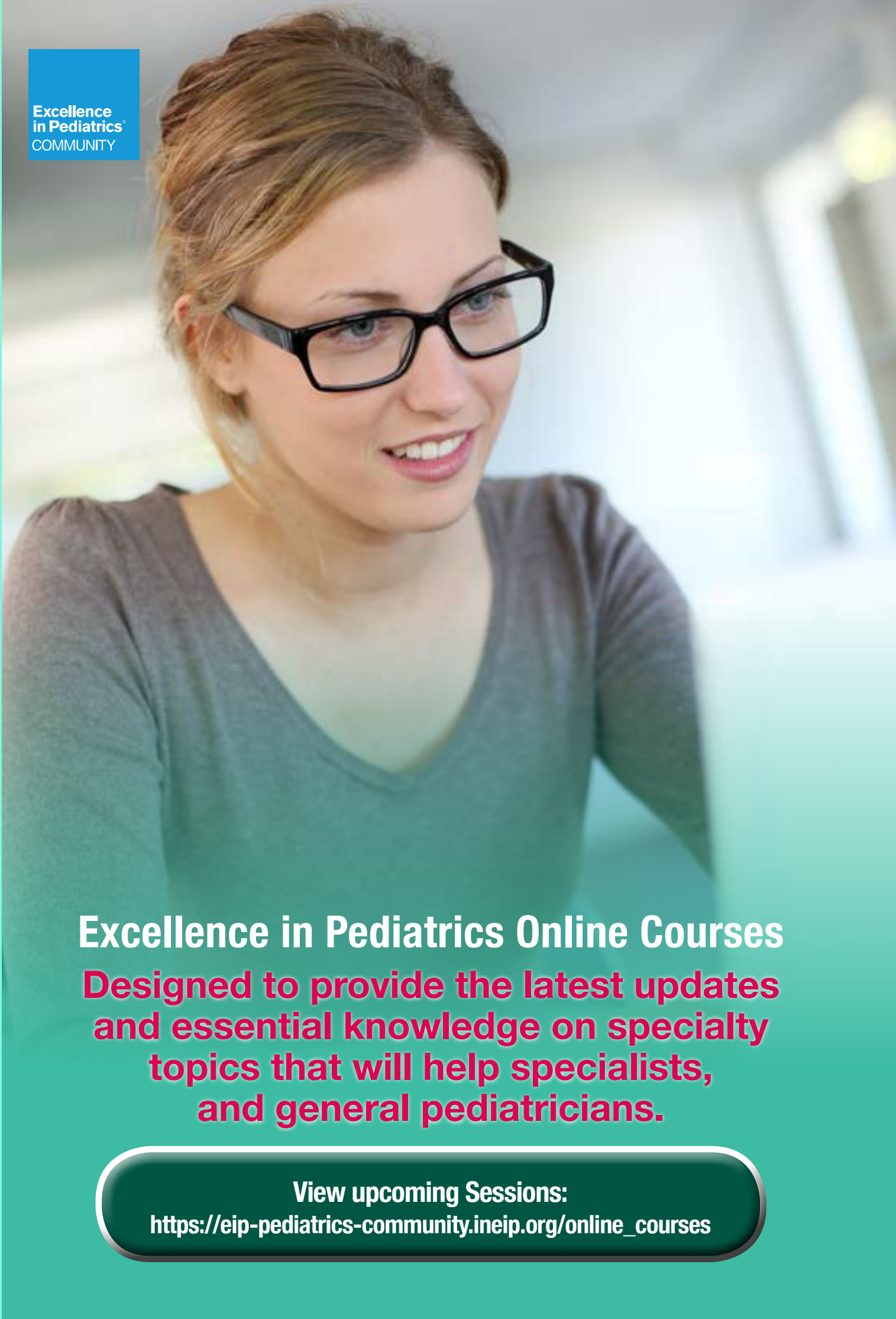
Working Together to Make Sure Vaccinations are Accessible to All.
This multi-stakeholders meeting discussed policy changes across Europe, reviews surveillance data and suggests strategies to overcome vaccine hesitancy. Many organisations involved in vaccinations are aligned and partners of the meeting. The ultimate goals of the Group is to increase vaccination rates across Europe and to advocate universal immunity against all vaccines preventable diseases for all age groups. The multi stakeholders meeting will discuss the latest policy changes across all European Countries, the latest surveillance data, the strategies to overcome vaccine hesitancy and the coordination of actions to take in 2019 between the various participating organisations.

The 3rd Life Course Immunisation Focus Group is taking place on Friday 7th December 2018 in Hall Euforia from 10:00-14:00. The meeting puts you as a frontline healthcare professional at the centre of immunisation strategy. This is an open meeting and we would encourage you to join to help improve vaccinations rates across Europe and attend for as much as the meeting as you can.

Date & Time	Friday 7th December 2018, Prague, Czech Republic 10:00-14:00
Location	Grandior Hotel - Hall: Euforia (coffee and lunch provided)

3rd Focus Group Meeting Agenda		
10:00-10:15	Welcome	**Introduction to the Focus Group from the Chairs** Purpose of meeting, structure, desired outcomes. **Terence Stephenson & Daphne Holt**
PART 1: POLICY		
		Setting the Scene - Overview of Vaccines Policies, Changes Made An overview of current vaccines policies across Europe Updates from the European Commission and Countries Section Chaired by: **Malcolm Taylor**
10:15 - 10:35	Europe	**Update on Surveillance & Population Coverage Across Europe - 2018** Speakers: **Carlo Signorelli and Anna Odone**
10:35 - 10:55	Czech Republic	**Vaccination Update - Czech Republic** Speaker: **Roman Prymula**
10:55 - 11:15	Lithuania	**Vaccination Update - Lithuania** Speaker: **Vytautas Usonis**
11:15 - 11:35	Poland/Norway	**Comparison of Policies Between Norway and Poland** Speaker: **Pawel Stefanoff**
11:35 - 11:55	European Commission	**Update on policies and actions in the European Union 2018/19** Speaker: **Michael Sulzner**
11:55 - 12:10	Open Forum	**Reviewing the changes made in individual countries and within the decision-making bodies of the European Union.**

PART 2: INNOVATIONS	
	What is new in vaccination across Europe Section Chaired by: **Daphne Holt**
12:10 - 12:40	**Update from the Coalition for Life Course Immunisation (CLCI)** Presented by: **Malcolm Taylor** **Presenting the Vaccine Champions -** The winner of the Vaccines Today Champions competition who will update the group on their work Presented by: **Gary Finnegan & Mihai Craiu** **Presenting the 2019 Vaccines Survey and Together Platform (EIP)** Presented by: **George Syrogiannopoulos & Russell Hale**
12:40 - 12:50	Lunch Served (Please return to assigned Groups for Working Lunch)
PART 3: FOCUS GROUPS	
	Introduction to the Focus Groups, Procedures, Outcomes and Reporting Section Chaired by: **Terence Stephenson**
12:50 - 13:30	**Focus Group A** **Working Group on Healthcare Professional Advocacy & Hesitancy**
A	**Overcoming HCP Hesitancy** Strategies to overcome healthcare professional hesitancy in adopting new vaccines Led by: **EiP - Leader: Terence Stephenson, Rapporteur: Diana Frasquilho**
12:50 - 13:30	**Focus Group B** **Working Group on Economic Value of Life-course Immunisation**
B	**Economic value of vaccinating across the life course** What is known, what are the gaps, why is it important? Led by: **ILC - Leader: David Sinclair**
12:50 - 13:30	**Focus Group C** **Working Group on Antimicrobial Resistance and Vaccines**
C	**Policy and practice** Moving on from the Policy Forum arranged by CLCI at the European Parliament in June 2018. What are the practical steps? Led by: **CoMO - Leader: Sam Nye, Rapporteur: Becky Parry**
12:50 - 13:30	**Focus Group D** **Working Group on Mandatory Vaccination**
D	**A Solution or part of the problem?** Several European countries have made childhood vaccinations mandatory. Is this the right way to go for adult vaccinations or for healthcare professionals? Led by: **CLCI - Leader: Daphne Holt, Rapporteur: Malcolm Taylor**
12:50 - 13:30	**Focus Group E** **Working Group on Herd Immunity**
E	**Herd Immunity** Strategies to increase the awareness of the importance of herd immunity Led by: **EiP - Leader: George Syrogiannopoulos**
PART 4: CONCLUSIONS AND CLOSE	
	Outlining of Ideas from the Focus Group and Future Actions
13:30 - 13:55	Rapporteur or Leader for each Focus Group to report back to the full meeting
13:55 - 14:00	Co-Chairs' Summary and Close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CONFERENCE PROGRAMME

ABSTRACT BOOK

Abstracts

ABSTRACTS

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ABSTRACTS
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Presentations

ID: 269

Sleep Habits in Children with ADHD and the Effects of Medication

Adrião, Mariana[1]; Guardiano, Micaela[2,3]; Rocha, Sofia[3]; Afonso, Sandra[4]; Glória e Silva, Filipe[4]
[1]Pediatrics' Department, Centro Hospitalar de São João, Oporto, Portugal; [2]Neurodevelopment Unit, Pediatrics' Department, Centro Hospitalar de São João, Oporto, Portugal; [3]Public Health Unit, ACES Grande Porto VIII (Espinho/Gaia); [4]Neurodevelopment Unit, Child & Adolescent Center, Hospital CUF Descobertas, Lisbon

Introduction: Sleep disturbances are known to correlate with Attention Deficit Hyperactivity Disorder (ADHD). This association is most likely bidirectional – ADHD may affect the sleep pattern and disrupted sleep may exacerbate ADHD executive dysfunction. Additionally, sleep is thought to be affected by ADHD medication, although the frequency and extent of this interaction are not well defined.

Purpose: To characterize the influence of ADHD medication on sleep in children and adolescents.

Material and Methods: A cross-sectional multicentric study was accomplished using a pretested questionnaire, adapted from the Children's Sleep Habits Questionnaire, in order to assess sleep habits in a pediatric population medicated for ADHD. The participants were enrolled in neurodevelopmental pediatrics appointments. Data were analyzed using IBM SPSS statistical software, version 25.

Results: This study included 195 children and adolescents with ADHD. The average age was 11.3 years old (SD 2.7, range 6 to 17) and 75.4% (n=147) were male. Concerning sleeping habits, 20% (n=39) usually resist to go to bed, 18.5% (n=36) usually need another person in the room to fall asleep, 28.7% (n=56) usually fall asleep watching TV or other electronic devices and 52.8% (n=103) take more than 30 minutes to fall asleep. In the morning, 35.4% (n=69) usually show difficulty getting out of the bed and 15.5% (n=30) usually look or feel tired. Most of children (94.9%, n=185) were medicated with methylphenidate. Regarding its dosage, 13.5% (n=25) were treated with less than 0.5 mg/kg/day, 72,4% (n=134) between 0.5 and 1 mg/kg/day and 14.1% (n=26) over 1 mg/kg/day. The majority did not take medication on weekends. When using medication, most children reported no differences concerning the time when they felt sleepy at night (85.0%), the time to fall asleep (84.4%) or the number of nocturnal awakenings (90.7%).

Conclusion: This study suggests that methylphenidate does not affect the sleep pattern in most children and adolescents. The high prevalence of behavioral sleep problems in children and adolescents with ADHD reinforce the need to continually address these issues in follow-up appointments.

ID: 211

Neuromyelitis Optica - A Case Report

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Introduction: Pediatric optic neuritis is a rare disorder that may arise in isolation or as part of the manifestations of an inflammatory and demyelinating disorder of the central nervous system (CNS). Clinical presentation and prognosis are widely variable, depending on the etiology. For its treatment, systemic corticosteroid therapy is recommended, and other immunosuppressants may be needed.

Case report: A previously healthy 13-year-old girl resorted to the emergency department (ED) with blurred vision for over three months, initially accompanied by acute right eye pain. Her past medical and family history was negative. Preliminary investigation by a private ophthalmologist found signs of optic atrophy in fundoscopy of the right eye (RE). On physical examination in the ED she presented a visual acuity of < 0.1 in the RE and an ipsilateral relative afferent pupillary defect. Brain MRI showed a T2-weighted hyperintensity involving the right optic nerve and the optic chiasm. Cerebrospinal fluid testing was normal (with absent oligoclonal IgG bands), while her serum sample was positive for anti-aquaporin 4 antibodies (APQ4-ab). Given a diagnosis of neuromyelitis optica (NMO) with positive AQP4-ab, she started with oral immunosuppressive therapy with prednisolone and azathioprine, showing signs of stabilization of the disease.

Discussion and Conclusions: NMO spectrum disorders are a rare group of ever-expanding autoimmune disorders with a higher female ratio, a typical age of onset in the fourth decade of life and unfavorable prognosis. Initially considered a subtype of multiple sclerosis, nowadays it is known that NMO is a distinct entity, not always associated with anti-AQP4 antibodies, with a phenotype which includes more subforms other than the classic optic neuritis and transverse myelitis firstly described by Devic. Early diagnosis and management can significantly improve its prognosis.

ID: 215

The Role of Methylphenidate XL in Narcolepsy in Children

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Introduction: Narcolepsy is a rare autoimmune neurological disorder characterised by excessive daytime sleepiness associated with cataplexy, hypnagogic/hypnopompic hallucinations and sleep paralysis. The onset of symptoms can occur in childhood or adolescence. There can often be significant delay in diagnosis due to misinterpretation of symptoms and signs as seizures, hypothyroidism or psycho-social causes. Early

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recognition and diagnosis can lead to an earlier onset of therapeutic intervention thus leading to a lower impact on academic performance and social ability. Methylphenidate XL is a central nervous system stimulant medication and is currently used first line as part of the medical management of narcolepsy in children.

Purpose: To demonstrate the successful role of methylphenidate in the management of narcolepsy in children.

Case Description: A total of 15 patients between 6 and 16 years old were seen in paediatric Sleep clinic There were 10 male patients and 5 female patients. There were 12 patients with a diagnosis of narcolepsy and 3 patients with narcolepsy and additional cataplexy. All 15 patients had associated HLA DQB1*0602 and a short latency time during a Multiple Sleep Latency Test (MSLT). CSF examination revealed low hypocretin in 11 patients (4 did not have a lumbar puncture performed.) Management of all the patients comprised a combination of sleep hygiene advice, scheduled daytime naps and a titrated dose of methylphenidate XL. All patients received between 18mg and 56mg to control symptoms. 1 patient received additional modafinil.

Results: Methylphenidate XL has led to a reduction in excessive daytime sleepiness in all 15 patients.

Conclusions: Stimulant medications remain popular treatments for use in narcolepsy. Methylphenidate XL is not licensed for use in narcolepsy in children however remains first line for use in excessive daytime sleepiness due to its positive outcomes. XL preparations are convenient due to their once a day preparation. Side effects include loss of appetite, nausea, anxiety, dry mouth and insomnia and can be problematic . There remains a fine balance between an appropriate dose to achieve a reduction in symptoms and avoiding side effects.

ID: 257

Headache, Neurologic Deficits and Cerebrospinal Fluid Lymphocytosis Associated with Borrelia lusitaniae Infection

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Introduction: Headache with neurological deficits and cerebrospinal fluid lymphocytosis (HaNDL) is an uncommon headache syndrome described as “non-infectious inflammatory intracranial disease”, presumably related to a transient immune-mediated CNS inflammation. Probably post infectious, etiology and pathophysiology are incompletely understood, with CSF investigations for an infectious agent almost consistently negative.

Case Report: Fifteen-year old male with a previous history of an episodic headache with clinical features of migraine, was referred with a suspected diagnosis of acute confusional state. He presented with severe periorbital pain and left sided frontal headache associated with hypoesthesia and paraesthesia in his right upper limb and difficulty to speak. The patient had a paraphasic speech consistent with motor aphasia and no problems of language comprehension. He had a questionable deviation of the tongue to the left and slight gait imbalance without any preponderant direction. He had no other abnormal findings on examination. MRI was normal and the cerebrospinal fluid demonstrated a pleocytosis (194/µL) with predominant lymphocytes, normal glucose levels and mildly elevated protein levels (53 mg/dL). Unexpectedly, PCR was positive for Borrelia burgdorferis ensulato (s.l.) and the sequence revealed the presence of DNA of Borrelia lusitaniae. The patient was treated with 21 day course of ceftriaxone with a full recovery from headache, aphasia and sensory symptoms within less than 24 hours and remains asymptomatic with normal neurological examination.

Discussion: The isolation of Borrelia lusitaniae was concomitant with CSF lymphocytosis and clinical presentation compatible with HaNDL. Borrelia lusitaniae is prevalent in mediterranean countries, with only few cases reported implicated human disease. But would untreated disease continue to meet HaNDL criteria? Because the favorable outcome and consequently symptomatic treatment of HaNDL, it´s imperious to consider other diagnosis, especially serious and/or treatable entities.

ID: 286

Mutation Spectrum in Turkish NF1 Patients

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[1]Ege University School of Medicine Department of Medical Genetics, Turkey; [2]Acıbadem University School Of Medicine, Turkey; [3]Ege University School of Medicine Department of Pediatric Genetics, Turkey

Introduction: Neurofibromatosis type 1 (NF1) is one of the most common autosomal dominant inherited disorders caused by mutations of the NF1 gene with a prevalence of 1/2,500 individuals. The best known features of the disease are six or more café au lait macules, freckling in axillary and/or inguinal regions, iris Lisch nodules and plexiform neurofibromas. NF 1 is one of the largest genes composed of 57 exons (NM_000267.3) encoding for neurofibromin which is a large cytoplasmic protein responsible for tumor suppression. More than 2000 mutations have been reported (KOet al 2013)which are point and splice mutations while intragenic deletions are rare.

Purpose: The aim of this study is to investigate NF1 mutation spectrum in Turkish NF1 patients.

Material and Methods: We used illumina MiSeq platform and performed next generation sequencing method to identify the mutations.

Results: We identified 9 different mutations in 9 patients, c.7783delA , c.6481delT, c.7875delA, c.910C>T, c.2041C>T, c.7151_7152insT, c.1278G>A, p.E962X(c.2884G>T), c.6746-6748delTTG mutations respectively. Mutations, c.(2884G>T) , 7151-7152insT, c.6746-6748delTTG, c.7875delA, c.6481delT and c.7783delA were novel mutations and were described for the first time in NF1 patients. In conclusion distribution of mutations in Turkish NF patients are heterogeneous as in other populations.

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ID: 248

Effect of Treadmill Training on Executive Function Behaviors and Qualityof Lifein Children with Attention Deficit Hyperactivity Disorder

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Introduction: Attention deficit hyperactivity disorder (ADHD) is a childhood-onset neurodevelopmental disorder characterised by developmentally inappropriate and impairing inattention, motor hyperactivity and impulsivity, with difficulties often continuing into adulthood (1). It is reported in the literature that children with ADHD may have executive function deficits, behavioral disorders and motor impairments. Furthermore, studies have shown that exercise, such as acute and chronic aerobic exercises improves executive functions and motor abilities and so it is hypothesized that exercise may have a potential or additional treatment option for children with ADHD.

Purpose: The literature emphasizes the importance of physical activity in children with ADHD, but there is no clarity regarding the frequency, intensity or duration of the exercise. Thus, the aim of this study was to investigate the effects of treadmill training as an aerobic exercise on executive functions and quality of life in children with ADHD.

Materials and Methods: 15 subjects aged between 7 and 11 years who are diagnosed with ADHD received treadmill training for 8 weeks, 3 days per week and each session for 45 minutes. Assessments were applied before the beginning of the training program and at the end of 8th week. Executive function behaviors in the school and home environments of subjects were evaluated with Behaviour Rating Inventory of Executive Function (BRIEF)-Parents and Teacher Form; quality of life with the Pediatric Quality of Life Inventory (PedsQL) –Children and Parents Form. Statistical analyses performed using SPSS version 20 (SPSS Inc.,USA) and used Paired Samples T-Test to compare the differences.

Results: At the end of the training program, all the assessment results improved significantly in both groups ($p<0,05$).

Conclusion: This study showed that exercise training may be a beneficial treatment approach for children with ADHD.

ID: 164

The Immediate Effects of Ankle Foot Orthosis on Balance in Children with Cerebral Palsy

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Introduction: Balance deficits in patients with cerebral palsy (CP) are caused by problems of musculoskeletal system as well as sensation-perception-motor integration problems. Ankle-foot orthosis (AFO) are often prescribed to correct abnormal gait and facilitate gait training and functional activities. Systematic reviews evaluating effectiveness of AFO on gait in children with CP concluded that they improve gait parameters. However, the impact of AFO on certain gait parameters (velocity, cadence, energy consumption, hip kinematics), as well as on gross motor function, balance or participation is still under debate. The results of studies examining effects of AFO on balance of patients with CP are conflicting.

Purpose: In this study, we aimed to examine the immediate effects of AFO on balance in children with CP.

Method: 18 (9 males) children with CP participating physiotherapy program 2 days a week were included in this self-controlled study. Berg Balance Scale and one-leg standing tests were used to analyze outcome of balance with and without AFO, respectively. AFO was applied to paretic side for patients with hemiplegic CP, whereas to dominant side for diplegic CP.

Results: Study population were 9 children with spastic diplegia, 8 with spastic hemiplegia and 1 with ataxic type. The mean age of participants were 9.6 ± 3.6 years, the mean height was 130.0 ± 21.6 cm and the weight average was 30.5 ± 14.6 kg. There was no statistically significant difference between the evaluations, with and without AFO, in terms of Berg Balance Scale and one-leg standing test results ($p>0.05$).

Conclusion: In our group of children with CP, AFO had no immediate positive or negative effect on balance.

ID: 285

Bilateral Thalamic Necrotizing Encephalopathy

Martins, Inês Fidalgo; Silva, Rita; Pereira, Gabriela; Vieira, José Pedro; Brito, Maria João
Hospital de Dona Estefânia - CHCL.EPE Lisbon Portugal, Portugal

Introduction: Acute necrotizing encephalopathy (ANE) is a rare and severe acute encephalopathy and is characterized by rapid neurologic deterioration preceded by a virus-associated febrile illness. Cerebrospinal fluid pleocytosis is absent and the suggestive imaging pattern consists on symmetric multifocal thalamic lesions

Case Description: A previously healthy 4-year-old boy presented with fever, dry cough pharyngitis and drowsiness with a GCS of 14, diminished strength on both arms, gait ataxia, Babinski sign bilaterally. Head CT and CSF analysis were normal, and he started acyclovir and ceftriaxone. Within hours his condition deteriorated, with a GSC of 11, only responding to noxious stimuli and required intensive care. EEG showed slow and poorly differentiated activity, etiologically nonspecific. Ciprofloxacin and oseltamivir were associated to his therapy and he was also given immunoglobulin 1g/kg for two days and methylprednisolone 30 mg/kg/day for 5 days. MRI showed bilateral thalamic lesions suggesting acute necrotizing encephalitis. Because metabolic etiologies such as Biotin-Responsive Basal Ganglia Disease could not be excluded he also was started on biotin and thiamine. PCR search for respiratory virus was positive for adenovirus and parainfluenza 3, and negative for Influenza A and B. The remaining work-up was negative and oseltamivir, ciprofloxacin and acyclovir were suspended. The patient's mother had a history of acute encephalopathy in childhood, and her CT scan showed thalamic lesions. The child gradually improved and was discharged after 9 days with no neurologic sequelae.

Conclusion: ANE is an immune-mediated disease with a potentially devastating course. ANE should be included in the differential diagnosis of encephalopathy with a rapid evolution. Its pathogenesis is not completely understood. This case shows that less frequent viral agents may be involved, and family history should also be valued as some forms of ANE seem to be familial.

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ID: 116

Comparison of Screen Viewing Time (SVT) in Preschool Children withTypical Development and those with Developmental Delays: A Retrospective Pilot Study

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Introduction: Screen viewing time (SVT) refers to time spent in front of a screen including mobile phones, tablets, computers, television. Research shows that children who have heavy screen viewing time in the first three years of life incur significant physical, and developmental burdens and are at higher risk for problems in attention, language and behaviours. The association of SVT with autistic behaviours in children remains unclear.

Purpose: To determine if there is a significant difference in screen viewing time in children with 'typical development' versus those with 'speech delays' and children with 'autistic symptoms'.

Materials and Methods: A retrospective study of preschool children who presented to the Child Development Unit (CDU) from 1 Feb 2016 to 1 Feb 2018. Children who presented on the first visit with typical development were compared with those who presented with autistic symptoms or speech delay (non autistic). As CDU is a tertiary referral centre, this was a convenience sample with data from children with typical development obtained over a 2 year period while data from children with autistic symptoms and speech delay (non autistic) were captured in the first 3 months of 2017. Comparison of the two groups with reference to the typical development group (while adjusting for age and gender) was performed with Bonferroni correction using ANCOVA.

Result: 113 preschool children with a mean age of 39 months were included in analysis (30 typical development, 42 autistic symptoms, 41 speech delay). The mean weekday screen viewing time in children with 'autistic symptoms' and 'speech delay' was more than 2 times that of the children with typical development (2.32 hrs, 2.39 hrs vs 1.05 hrs respectively $p < 0.001$). The maximum reported screen time that the 'autistic' and 'speech delayed' group was 'EVER' exposed to was almost 2.5 times that in the 'typical development' group (2.86 hrs, 2.76 vs 1.16 hrs respectively $p < 0.001$) though up 17% of children in these group were no longer exposed to screen time at these levels.

Conclusion: In the CDU, there is a significant association between screen viewing time, autistic symptoms and speech delay. Screen time history taking during developmental history taking is now an essential part of developmental history taking and targeted advice could improve a child's early environment. Further research is needed to confirm our findings and evaluate the biological mechanism for this finding.

ID: 207

Correlation between Headaches and Electroencephalographic Changes

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Introduction: Electroencephalography (EEG) is a useful additional tool for the clinical assessment of migraine or non-migraine headaches in childhood. The EEG changes that are most commonly observed are focal or generalized slow activity, spike activity and spike-slow wave complexes.

Purpose: The purpose of this study is to evaluate EEG findings in children with headaches end to calculate the correlation between EEG changes and migraine or non-migraine headaches.

Materials and Methods: The data were collected from the hospital electronic medical system. The period from 01.01.2016 until 31.08.2018 was processed. Electroencephalography was performed in 187 children aged 5 to 14 with headache.

Results: Out of 187 children, 12 had a migraine headache, and 175 had non-migraine headache. EEG changes have been reported in 7 children with migraine (58%) and 27 children with non-migraine headache (18%). Pearson correlation coefficient was calculated.

Conclusion: Migraine and EEG changes are significantly associated.

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ORAL PRESENTATIONS: GENERAL PEDIATRICS - PART 1

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ID: 190

Comparison of Respiratory Parameters and Functional Capacity of Two Cases Using Cochlear İmplant and Hearing Aid

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Introduction: Children's motor skills and physical performance increase with age through the development of neuromuscular and cardiorespiratory systems. The formation of speech sound is associated with the function of the respiratory system. Children with hearing loss may experience decreased respiratory function.

Purpose: We aimed to compare the respiratory function, respiratory muscle strength and functional capacity of two patients with sensorineural hearing loss. One of these patients uses cochlear implant (CI) and the other uses hearing aid (HA) at the age of 8 years.

Table 1: Evaluated parameters

	Child with CI	Child with HA
FVC (lt)	2.12	1.46
FVC % predicted	106	82
FEV1 (lt)	1.80	1.18
FEV1 % predicted	103	70
FEV1/FVC (%)	84.9	80.8
FEV1/FVC % predicted	101	96
PEF (lt/sn)	2.91	1.85
PEF % predicted	81	58
FEF25/75 (lt/sn)	1.91	1.20
MIP (cmH2O)	61	48
MEP (cmH2O)	55	44
6MWT (m)	520	485

CI: Cochlear implant, HA: Hearing aid

Materials and Methods: Demographic and clinical information of two patients with good mental status were recorded. Forced vital capacity (FVC), FVC%, forced expiratory volume in one second (FEV1), FEV1%, FEV1/FVC ratio, 25-75% of forced expiratory flow (FEF25-75), FEF25-75%, peak flow rate (PEF), PEF% values were measured and recorded by spirometry. Respiratory muscle strength was assessed by measuring maximal inspiratory / expiratory pressures (MIP / MEP) using a portable mouth pressure meter. Functional capacities of two cases were evaluated with 6 minute walking test (6MWT). Blood pressure, pulse O2 saturation (SpO2) heart rate, Borg Dyspnea and Borg Fatigue scales were measured and recorded before and after the 6MWT. By modeling for each application, verbal communication was used for the child with CI and sign language was used for the child with HA.

Results: The evaluated parameters of the cases are shown in Table 1. Before/after 6MWT results of the child with CI and HA were SpO2 (99%, 97%; 98%, 97%), heart rate (73 beat / min, 91 beat / min; 76 beat / min, 97 beat / min), blood pressure (80/40 mm Hg, 85/50 mm Hg; 85/40 mmHg, 90/50 mmHg), Borg Dyspnea score (0/0.5; 0/0.5), Borg Fatigue score (0/1; 0/1), respectively.

Conclusion: According to pulmonary function test, MIP / MEP and 6MWT results; respiratory functions, respiratory muscle strength and functional capacity were better in the child with CI than the child with HA. The child with HA had lower values of respiratory function and respiratory muscle strength which may be related to the lack of verbal communication and also the child with HA had lower functional capacity which may be related to the weakness of postural control and consequently to the lack of physical activity. In light of these findings, we continue the study with a large sample in our department.

ID: 180

Demographic and Bio-profile of Children with Down Syndrome from an Urban Tertiary Care Hospital in India

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Objectives: To study demography, bio-profile, karyotype and management modalities in children with Down syndrome (DS).

Methodology: A retrospective observational study was done in the Tertiary Care Children's Hospital. Children of DS following up in the out-patient clinics, in-patient unit, NICU and PICU were assessed. The case record forms of patients were analyzed for the following information: age at presentation; sex; maternal and paternal age; maternal and paternal grandmother's age; dysmorphic features; type of congenital heart diseases; results of cytogenetic evaluation; endocrinological abnormalities; ophthalmologic and auditory evaluation; management modalities.

Results: The study included 101 cases of DS presenting over a period of 1 year. Male: Female ratio was 1.1:1 (55 males and 46 females). Average age at presentation was 6.55 years (range:1 day-18 years). Average maternal age at birth of the patient was 25.62 years (range:16-45 years). The average age of maternal grandmother during conception of the mother was 27.64 years (range:16-45 years). Normal fetal movements during pregnancy were perceived by 94% of mothers. More than 75% cases showed craniofacial abnormalities like mongoloid slant, low-set ears, epicanthic folds and flat facial profile. Hypotonia was seen only in 58% cases. Limb and dermatoglyphic anomalies were seen in <50% cases which included sandle sign (32%), simian crease (39.6%), clinodactyly (22.8%), and brachydactyly (32.7%). Cytogenetic abnormalities seen were Non-disjunction in 93%, translocation in 4% and mosaicism in 3%. 2D-echocardiography results showed normal heart in 62% cases. The most common cardiac anomalies were ventricular septal defect (13.86%), atrial septal defect (18.9%), Primary or secondary pulmonary hypertension (17.2%). Common AV canal defect was seen in only 2% cases. Thyroid Function Tests was abnormal for 37 patients with hypothyroidism in 29 cases and surprisingly, even hyperthyroidism in 8 patients! Ophthalmologic abnormalities included refractory errors (19%), nystagmus (3.1%), strabismus (4%). Only 3.8% cases had cataract. Hearing abnormality was seen in 34 cases (conductive hearing loss in 28, mixed hearing loss in 4). Pure sensorineural line hearing loss in only 2 cases. Half the study population was on Physiotherapy, Speech therapy and Occupational therapy.

ORAL PRESENTATIONS: GENERAL PEDIATRICS - PART 1

Conclusions: DS has a varied clinical presentation with multi-system involvement. Facial dysmorphisms in Indian children with DS were not too different from most other studies. Non-disjunction was the commonest chromosomal anomaly. Congenital heart disease was seen only in 37% cases. Type of deafness and Ophthalmologic abnormalities certainly differed from the usual. Maternal age had no bearing in the occurrence of DS unlike previously believed.

ID: 199

Pediatricians' Perspectives on Social History: A Qualitative Study

Fırat, Merve Çiçek; Yalçın, Sıddıka Songül
Hacettepe University, Turkey

Introduction: Social history (SH) provides a significant opportunity for health advocacy in child health. Social determinants of health (SDH) can be excellently tied to current practices as well as educational curricula through SH. However, SH remains underappreciated with its limited utilization in clinical practice. Little is known about pediatricans' views on SH and screening for social determinants of health through SH.

Purpose: The purpose of this study was to evaluate the SH in the light of pediatricians' experiences, and to develop a deeper insight into the reasons limiting the use of SH.

Materials and Methods: A qualitative research method with an interpretivist approach was used. In-depth interviews were conducted with 12 physicians, 11 of whom were pediatricians (residents and specialists from different urban-suburban working settings in Ankara). Additionally a focus group study was conducted with 6 pediatric residents. Interviews and the focus group were audio-recorded, transcribed verbatim, and reviewed for themes with content analysis.

Results: SH has broad definitions in pediatricians' statements and a narrow scope in clinical practice. Analysis has shown three mainstream topics of SH; child's relationships, child's daily life and socioeconomic status. Although all pediatricians stated that socioeconomic conditions have vital influence on child health, most of the participants reported hesitation to ask questions related socioeconomic status. SH is generally associated with an 'ideal' history by the participants. It is widely accepted that SH taking improves patient-physician relationships. Most of the participants are not aware of existing screening tools for SH. Few are positive towards screening for SDH while more than half of the participants are distant with various causes; mainly, doubts on necessity for each patient and time concerns. The analysis of participants' statements interestingly has indicated that principal objective of SH is mainly diagnosis and treatment, rather than health advocacy.

Conclusion: Even though pediatricians describe the SH as part of an 'ideal' history, clinical practice is limited. There is variation in opinions regarding screening. The study demonstrates that it will be important to take into account that it requires a mindset shift from 'diagnostic' to 'advocative' when adopting SH as a screening tool for SDH. Medical education and residency training seems to be the key for that shift.

ID: 144

Psychometrıc Propertıes of The Turkısh Versıon of the Parent Perception of Uncertainty Scale (PPUS) Among Parents of Hospitalized Children

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Aim: Parents experience high levels of illness uncertainty, which is defined as a sense of loss of control and a perceptual state of doubt that changes over time. This study aimed to evaluate psychometric properties of the Turkish version of Parent Perception of Uncertainty Scale (PPUS).

Methods: It was a methodological study. Data were obtained from parents of 312 hospitalized children by using socio-demographic data collection form, PPUS (31 items and four factors), and Spielbergers Permanent and Situational Anxiety Level Inventory. SPSS 22 and AMOS programs were used for analysis (mean, standard deviation, t-test, correlation, etc).

Results: Content validity index was 1.00, intraclass correlation coefficient was .94 ($p<0.05$) and item total correlation point was found enough (between .27 to .59) for PPUS according to literature. The relationship between item scores and subscale scores and correlation of PPUS sub-dimensions with total scale score were found statistically significant ($p<0.001$). Cronbach alpha reliability coefficient was found .86 for total scale and between .60 to .80 for subscales. Chi-square/sd (1.84), RMSEA/p (065/p<.05), SRMR (.80), CFI (.92), NNFI (.91) were analysed for confirmatory factor analysis and found acceptable. There were no significant difference between the mean scores of PPUS for test and re-test period which showed PPUS was consistent and reliable. When the relation between the scores was examined, the intraclass correlation coefficient was .98 for the total scale, from .88 to .96 for subscales which was found highly statistically significant ($p<0.05$).

Conclusion: Turkish version of PPUS were found valid and reliable.

ID: 221

Role of Viral Pathogen in Hospitalized Children with Community Acquired Pneumonia in Qatar

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Introduction: Community acquired pneumonia is the leading cause of childhood morbidity and mortality globally, although the etiology of CAP varies by age, viruses remain the most etiologic agent and may lead to sever disease especially in children with co-morbidities. Data on community acquired pneumonia in children were found to be limited in Qatar.

Purpose: This study aimed to determine common virus associated with CAP in hospitalized children and to identify risk factor for pediatric intensive care unit (PICU) admission.

Methods: A cross-sectional single institutional retrospective descriptive study was performed at Hamad Medical Corporation, the only tertiary and academic medical center in the State of Qatar. The study included children admitted with community-acquired pneumonia from Dec 2017-June 2018, details of demographic and respiratory viral as detected by molecular assays were analyzed.

ORAL PRESENTATIONS: GENERAL PEDIATRICS - PART 2

Result: A total of 59 hospitalized children with diagnosis of CAP between 3 months-14 years were included, mean age at diagnosis 3 years, (49%) were male. A 43 patients (73%) had positive PCR nasal swab, single virus isolated in 31 case and multiple viruses in 12 cases. the most isolated virus was Rhinovirus (21%), Human Metapneumovirus (17%), Bocavirus (15%), H1N1 influenza virus (8%), Respiratory Syncytial Virus and corona viruses were the least common with (7%) each. Nearly 20/59 (33%) of children admitted to PICU ,15(25%) of them had positive viruses in which the most frequent were H1N1influnza and Rhinovirus with longer PICU stay (median 10 days). Common risk factor associated with PICU hospitalization; History of prematurity and bronchial asthma.

Conclusion: Our study revealed that Rhinovirus and HMP Virus were the most common causative agents in hospitalized children with CAP. This finding contrasts with a previous report from WHO in which RSV was the most frequently isolated virus. H1N1influnza virus play a major role in PICU admission, increase public and healthcare providers knowledge and awareness of adherence to annual influenza vaccine will reduce CAP complication and serious morbidity.

ID: 120

Supplementing Young Infants with Herbal Drinks: An Experience From The State Of Qatar

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Introduction: The American Academy of Pediatrics recommends exclusive breast milk for least 6 months. However, many parents administer some sort of herbal drinks to their infants. The reasons for herbal introduction might be associated with the ethnic background of parents.

Purpose: The aims of our study were to assess the frequency of supplementing young infants with herbal drinks and to delineate parental factors leading to the administration of such drinks to their little ones. This study has been conducted in the State of Qatar, a country with a diverse ethnic population.

Materials and Methods: A cross-sectional study using an interview questionnaire was conducted at Hamad General Hospital, the major tertiary and academic center in the State of Qatar. Parents of young infants (< 6 months of age) were included in the study.

Results: A total of 400 questionnaires were completed (response rate 98%). Participants of 35 nations living in the State of Qatar were included. Approximately 55% of participants were from the Middle East, 81% were females, and 53% were college graduates or higher. Our study has shown that almost 1 in 2 parents gave their children fluids other than milk at an age younger than 6 months. The most commonly given herbal drink was Anise (44%) followed by mint (13%), Chamomile (10%), multi-herbal drinks (6.6%), fennel (4.8%), thyme (1.7%) and cardamom (1.3%). When asked about the reason for giving such herbal drinks, 63% of families hoped it would relieve colic. Around 65% of families reported that herbal drinks have in fact, helped relieve colic and calm their baby, and 14% stated that the supplements improved their child's general health. Moreover, 6 % of participants believed that herbal drinks relieve constipation. Only 2% of participants reported side effects in the form of diarrhea and increased reflux. We investigated the source of parental information regarding herbal drinks, and we found that the most frequent source of information for initiating such drinks was friends and family (67%), tradition (24%) and health care professionals (21%). We asked these families whether they would recommend the same to their friends and relatives, and 57% answered with yes. The practice of administering herbal drinks differed among the participants' ethnic backgrounds. More than 55% of Middle Eastern families were administering their infants such drinks, compared to almost 37% of parents from Asian descent (p=0.003). We also noticed a difference in the age of initiation of such drinks. 30% of Middle Eastern families started at an age of less than 1 month while almost 50 % Asian families started at the age of 5-6 months (p=0.018).

Conclusion: A substantial number of residents in the State of Qatar are administering herbal drinks to their young infants. This might lead to delay in growth and perhaps inducing harm as the safety of such drinks has not been sufficiently studied in this young age group. The role of clinical care providers, including pediatricians, is crucial in counseling families about the uncertainty of herbal drinks.

ORAL PRESENTATIONS: GENERAL PEDIATRICS - PART 2

Presentations

ID: 181

Validating process of an Electronic Integrated Text, Visual and Audio Questionnaire (EITVAQ) to assess quality of life among children with hydrocephalus

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Background: To date, children with hydrocephalus continue to have a considerable impact on the long-term outcome. However, current literature on health-related quality of life (HRQOL) among children with hydrocephalus are limited. To date, there is a lack of a child centred, disease specific quality of life questionnaire among children with hydrocephalus. This serves a call for research to validate a suitable HRQOL to assess the quality of life among children with hydrocephalus?

Aims: To adapt EITVAQ (Electronic Integrated Text, Visual, Audio Questionnaire) into a phone/tablet application to gain widespread usage of EITVAQ by multidisciplinary teams. To validate EITVAQ as a tool to measure the quality of life status of children with hydrocephalus from the patient perspective.

Methods: The Validating Process of EITVAQ includes: 1) Content Validity using the nominal group technique. 2) Feasibility - Comparing the response rate, completion rate and time of completion with a validated HRQOL questionnaire. 3) Reliability - measuring using Cronbach- Alpha. 4) Concurrent Validity - compare reliability score with a validated HRQOL questionnaire

ORAL PRESENTATIONS: GENERAL PEDIATRICS - PART 2

Results: This study reports the result of the validation process. Content validity is achieved by the nominal group technique after 3 iteration. In this study, EITVAQ has proven to be feasible having a high satisfaction rate of 78%, response rate of 76.5%, an average completion time of 4 mins and 26 seconds. EITVAQ achieved an overall completion rate of 42.2% in comparison to the control (29.5%). EITVAQ has a score of 0.92 (Cronbach Alpha) showing a high internal consistency, which supports the reliability of this questionnaire. Further analysis is done by adding a validated questionnaire as control. EITVAQ (0.928) and the control (0.91) achieved a similar result which supports the concurrent validity.

Conclusions: EITVAQ, an interactive and child-friendly tool to assess quality of life is now validated. It aims to be used widely among children with hydrocephalus, providing a baseline assessment to allow smooth transition and integration to adult health services and community. By introducing a new skill (music-making using technology), we hope to improve executive function skill and overall quality of life.

ID: 123

The Potential Importance of Hypercobalaminemia as a Possible Early Marker in the Working Diagnosis of Malignancy and Blood Disorders

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Introduction: Hypercobalaminemia is defined by a rate of vitamin B12 above 950 pg/ml. The most obvious cause of hypercobalaminemia is taking too much of the vitamin in the form of supplements. Vitamin B12 is generally not considered toxic in high levels, but it is important to determine if the elevation due to excess vitamin supplements since the other causes of a high vitamin B12 level are usually serious such as solid tumours, blood diseases, liver diseases and kidney diseases.

Aim: The aim of this article is to review the association between hypercobalaminemia and malignancy & hematological disorders. The association of hypercobalaminemia and solid tumours was first described and documented by Carmel et al. in 1975 and in 1977. In ancient literature hypercobalaminemia is an anomaly frequently observed in malignant blood diseases including chronic myelomonocytic leukemia, primary hypereosinophilic syndrome, myelodysplastic syndromes and acute leukemias. In the series of Chiche et al., 23% of patients with high serum cobalamin had a solid cancer, which was previously unknown in 73% of cases and still at a non-metastatic stage in 80% of cases. In their work, Chiche et al. found a statistically significant association between vitamin B12 levels >1275 pg/ml and the existence of a malignant blood disease.

Results: According to a September 2012 study in "PLoS One," people with high vitamin B12 had a 4- to 18-times higher risk of having a blood disease. Table 1 summarizes the key data in the literature regarding high serum cobalamin observed in malignancy and hematological disorders.

DISEASE	ASSOCIATED HYPERCOBALAMINEMIA	ETIOLOGY
CML	Very frequent (up to 10 times normal value)	Production of granulocyte HCs.
ALs -promyelocytic	30% of cases	Production of granulocyte HCs
Polycythemia vera (PV)	30–50% of cases	Release of granulocyte HCs
Primary myelofibrosis	one-third of cases	Elevated apo-HC and apo-TCB II levels
Primary HES	Up to 30 times normal value	Production of granulocyte HCs.
HCC	50 % of cases	Production of HCs by the tumor or hyperleukocytosis

Table 1: Association between hypercobalaminemia and malignancies & haematological disorders

Conclusion: Based on the above, we can conclude that: it is possible to depend on hypercobalaminemia as non specific early marker in the working diagnosis of malignancy and hematological disorders.

ID: 260

Vaccination: Attitudes and Practices of Lebanese Pediatricians in their Clinics

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Introduction: vaccination is one of the most important prophylactic tools for prevention of infectious diseases. The side effects reported with some vaccines are the source of many misconceptions and of rejection of vaccines among both physicians and patients. This study aims to survey the attitudes of Lebanese physicians towards vaccines and the vaccination protocols that they use in their private practice.

Materials and Methods: It is a longitudinal survey according to a stratified sample covering the 5 governorates of the country. Pediatricians were recruited via email along with direct phone calls. The questionnaire contained general questions about vaccines, their side effects, and the vaccination protocols adopted by pediatricians in their private clinics and their preferred reference for these protocols. Subjective opinions and remarks about vaccines among these pediatricians were noted.

Results: Out of 234 pediatricians practicing vaccinations; Male to female ratio was 134:100.Age distribution 27.4%of physicians<40yo,38.5% 40-50 yo and 33.8% above 50 y.o.. Years of practice:38.9% 10-20 years,22.6% 20-30 years and 10.7% more than 30 years. The majority see 10-25 consultations per day (61.1% =143) versus more than 25 consultations per day (18.4%). As for the vaccinations protocols; most physicians follow the one issued by the Lebanese ministry of health consisting of 10 vaccines only. The updated schedule was issued 2 years ago in collaboration with the Lebanese pediatric society and Ministry of health that includes all vaccines even HPV and Meningitis ACWY. Most of the pediatricians trust vaccines and believe in their advantages; Regarding risks, 74.3% reported fever as the sole side effect of vaccination.10.7% reported severe diarrhea and 7.3% intussusception post vaccination.44.5% of physicians refer to international vaccination programs. 26.9% use international recommendations to supplement the local protocols.

Conclusion: Most Lebanese physicians abide the old protocol of vaccination issued by the Lebanese ministry of health that lacks HPV and meningococcal vaccinations. Most of them trust vaccines irrespective of their side effects.

ORAL PRESENTATIONS: GENERAL PEDIATRICS - PART 2

ID: 226

Vaccination From the Point of View of Students of Medicine: Do We Need to Change the Curriculum of Undergraduate Courses in Vaccinology?

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Introduction: The acquisition of evidence-based knowledge and the formation of a positive attitude in medical students regarding vaccination and vaccines become even more important as vaccine hesitancy increases in strength.

Subjects and Methods: The research was conducted at the Faculty of Medicine of the University of Split (FMUS) in 2017. The subjects were 773 medical students from the 1st to 6th year of studies, of which 488 (63.1%) were Croatian. They completed an anonymous survey questionnaire online.

Results: The attitudes and knowledge about vaccination and vaccines of 56.7% of students of medicine were based on undergraduate classes, 34.5% on informal sources, and 8.9% on information from the internet and social networks. The sources of information about vaccination and vaccines which students of medicine use have a significant effect on their prejudices regarding the link between vaccination and the occurrence of autism, allergies and allergic diseases, the opinion that the continuation of vaccination against diphtheria, poliomyelitis and tuberculosis is unnecessary because they are exotic and forgotten diseases, and that the subject of vaccination is sufficiently represented at the Medical Faculty. Croatian and foreign students of medicine differ significantly in their use of sources of information about vaccination, but also in their opinions about vaccination. Personal experience of participation in programmes of mandatory and recommended vaccination correlates with the choice of sources of information on the basis of which students of medicine form their attitudes about vaccination.

Conclusion: Almost half the cohort of students of medicine covered by the survey base their attitudes and knowledge of vaccination and vaccines on informal sources and social networks. The consensus of doctors, regardless whether they are directly involved in the vaccination programme or not, is the foundation of the success of its implementation. At the FMUS, as at most other medical faculties in Croatia and the world, there is no separate course in vaccinology within the undergraduate course, but the issue of vaccination is dealt with sporadically as part of different pre-clinical and clinical subjects. At a time when vaccination coverage is falling and there is a rise in vaccine hesitancy, a change in the curriculum of undergraduate courses is vital since students of medicine as future doctors require more systematic education in vaccinology.

ID: 188

Assessment of Pain and Adequacy of Pain Management in the Pediatric Emergency Settings

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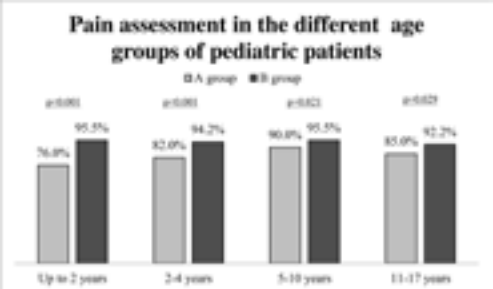
Introduction: IASP defines pain as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage”. Over the last decades great progress was made in pediatric pain evaluation and pain management. However, acute as well as chronic pain remains one of the most misunderstood, under-diagnosed, and under-treated medical problems, particularly in children.

Aims: To investigate accuracy of acute pain assessment and management in Pediatric Emergency Department in Hospital of Lithuania University of Health Sciences Kaunas Clinics.

Methods: A quantitative retrospective cohort study. Total of 1000 outpatient cards were analyzed. Age, origin of pain (trauma or disease related), pain characteristics, pain medication (calculated pro kg), pain score and its dynamics after painkiller were collected. Randomly selected cases were divided into two groups as following: group A – patient records from 2017, group B – patient records of 2018. Patients with chronic diseases, chronic pain cases, hospitalized patients or treatment refusal were excluded from the study. Additionally, patients in each group were divided into: trauma and non-trauma patients and subdivided into 4 different age groups. Statistical analysis was performed using Microsoft Excel and IBM SPSS Statistics version 21.0 software for Windows. Descriptive statistical methods were applied, Kolmogorov-Smirnov test, T criterion for calculating pairs of samples, Man Whitney U test and Chi-square test. A p value of < 0,05 was considered significant.

Results: We compared 500 pain cases per group A and B. There were 154 (30.8%) traumatic patients in group A vs 116 traumatic patients in group B (23.2%). Pain scoring was performed in 420 (84%) children in group A and it was statistically significantly less than in group B (94.4% of all 500 cases, p<0.001). Moreover, in all age groups of group B children received pain assessment more frequently (see Fig. 1) and were prescribed pain medication more often (see Table 1) compared to group A. We did not observe any difference in the pain assessment between trauma and non-traumatic cases in general (p=0.254). However, there was tendency to assess pain more often in non-traumatic patients in group A (p=0,054). We found that children in 2018 (group B) were medicated better (according to initial pain strength in documentation, painkiller type and dose counted pro kilogram of weight; p <0.001) but pain reduction (regarding pain strength dynamics) in group A was superior to group B. However, in group A traumatic patients experienced less pain relief compared to non-traumatic. Meanwhile, non-traumatic patients in group B received proper pain reliever more commonly (p <0.001). Group B patients experienced better pain reduction. However, pain relief in traumatic patients was less adequate compared to non-traumatic.



Age	Group A	Group B	p value
<2y	74%	93.3%	<0.001
2-4y	75.2%	89.1%	<0.001
5-10y	71%	84.7%	<0.001
11-17y	60%	74.1%	0.002

Table 1: Comparing appropriate pain medication usage between group A and B according to patients age.

ORAL PRESENTATIONS: GENERAL PEDIATRICS - PART 2

Conclusion: Our analysis showed that pain evaluation differed in both groups. In group B pain was evaluated more frequently and received pain-medication more often than group A. However, teenagers are still less likely to be given analgesics than toddlers. The tendency remains to give less painkiller to trauma patients compared to non-traumatic children.

ID: 229

Big Bites and Pearly Whites: A Public Health Initiative to Improve Children's Oral Health in North-West London.

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Background: Dental caries in childhood is a public health problem in the United Kingdom. Prevalence in North-West London (NWL) is significantly higher than the national average. Poor parental oral health knowledge and practices have been associated with paediatric caries. Evidence for use of brief intervention to promote paediatric dental health is limited.

Aims/Objectives: This study aimed to describe and explore associations between socio-demographics, parental oral health knowledge and practice and caries. It also aimed to assess change in parental oral health knowledge following dental brief intervention (DBI).

Methods: This is a preliminary analysis of an ongoing 3-year prospective study at Chelsea and Westminster Hospital. Parents of children ≤10 years attending the facility were recruited. Data about their children's socio-demographics, parental oral health knowledge and practice for their children were collected using a pre-intervention questionnaire. A cohort of participants received 10-15 minute DBI and post-intervention assessment was done. Associations between variables were tested. Logistic regression was used to estimate odds ratio (OR), 95% confidence intervals and p-values.

Results: A total of 427 participants were recruited. Onset of tooth-brushing after one-year, first dental visit after age two, and low maternal education increased the odds of caries [OR(CI)=3.07(1.46-6.49)], [OR(CI)=4.02(2.06-7.81] and [OR(CI)=3.60(1.70-7.60) respectively. Poor dental knowledge and practice contributed to caries in NWL. Significant changes in parental oral health knowledge post-intervention were observed [$p<0.05$].

Conclusion: Sociodemographic factors, poor parental oral health knowledge and practice contribute to caries among children in NWL. DBI shows early evidence for improving children's oral health within this region.

ID: 169

Clinical,Biochemical and Etiological Profile of Viral Fulminant Hepatic Failure

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Background: Viral hepatitis is a major health problem endemic in all parts of the world including India.Fulminant hepatic failure occurs in about one percent of patients hospitalized with acute viral hepatitis.In children the predominant causative agent appears to be hepatitis A virus alone or in combination with other infectious agents .Keeping such patients in intensive care units has achieved survival rates upto 30-40 percent.There is a paucity of literature describing spectrum of fulminant hepatic failure in Indian children.Hence the present study was conducted to determine the pattern of fulminant hepatic failure in children of Punjab region.

Aims & Objectives: To determine the pattern of viral markers in children with fulminant hepatic failure of viral etiology and to correlate the clinical and biochemical profile with etiological agents.

Materials & Methods: This study was conducted on children aged 1-15 years admitted in a tertiary care hospital,in north Indian province of Punjab. This was a prospective study conducted over a time period of one and half year. Children of fulminant hepatic failure of viral etiology were only included.

Observations: In this study total of 30 children with fulminant hepatic failure of viral etiology were studied. Male to female ratio was 2.3:1. Hepatitis A was the commonest virus associated with fulminant hepatic failure. The prolonged jaundice at admission and greater time interval between onset of jaundice and onset of encephalopathy indicated poor prognosis. Mortality rate was 26.6 percent in our study. Non survivors as a group had significantly lower platelet counts. Majority of children were not vaccinated against hepatitis A.

Conclusions: Hepatitis A was the most common etiological agent in the cases of fulminant hepatic failure in children. As it is transmitted by feco-oral route,hand washing and proper hygiene especially while cooking will go a long way in keeping this virus away. Most importantly all children must be vaccinated against hepatitis A virus and this vaccine should be included in national immunization schedule. Timely ICU care will also save many a children with fulminant hepatic failure.

ID: 182

Closed Neural Tube Defects in Neonates and Infants: The Experience of an Academic Hospital

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Introduction: The association of a simple sacral dimple with closed neural tube defects (CNTD) has not been clearly defined. Most of CNTD are associated with overlying cutaneous abnormalities. However, not all dorsal cutaneous stigmata are associated with spinal dysraphism.

Purpose: Our goal was to determine the incidence of spine abnormalities in neonates with sacral dimples or other cutaneous stigmata.

Materials and Methods: The authors reviewed the medical records of all neonates and infants referred to perform spinal ultrasonography from January 2013 through July 2018, at an academic hospital.

ORAL PRESENTATIONS: RHEUMATOLOGY

Results: During the study period, 289 infants underwent screening spinal ultrasonography. The average age was 35 days old. 19.4% were neonates with other malformations, including 11.4% with urogenital and 3.5% with anorectal abnormalities and 4.5% with others. The clinical examination revealed 61.6% with simple midline dimple; 28.7% with other types of cutaneous stigmata (8.7% hemangiomas, 2.4% masses, 4.2% caudal appendages, 3.1% hairy patches); 1.0% had atypical dimples and 6.9% had some kind of gluteal cleft anomaly (deviated or duplicated cleft). Twenty-eight (9.7%) had a positive sonogram: 4 (9.5%) had a low conus without other signs of tethering; 4 (9.5%) with spinal dysraphism; 3 (7.1%) had a fatty filum; 2 (4.8%) had decreased conus motion; 6 (14.3%) had a cyst in terminal filum and 19 (33.3%) had a fistula track (5 of which up to the coccyx). Twenty-three (8%) underwent magnetic resonance and 52.2% had abnormal imaging: 5 with spinal dysraphism, with 2 lipomyelomeningocele (1 associated with tethered spinal cord), 2 tethered spinal cord, 1 spinal cord lipoma and 3 dermal sinus tract (1 with a concomitant lipoma). Of these, 5 underwent surgery and 7 had conservative treatment.

Conclusion: Similar to previous studies, the most common cutaneous stigmata was the simple middle line dimple and was not associated with high risk for spinal dysraphism. The combination of sacral dimples with overlying cutaneous abnormality or the existence of atypical dimples are associated with higher risk for CNTD. Recognition of suspicious lesions is important for an early referral and to reduce the risk of neurological, urological or orthopedic complications.

ORAL PRESENTATIONS: RHEUMATOLOGY

Presentations

ID: 132

Assessment of Quality of Life in Children with Rheumatic Fever and Rheumatic Heart Disease Using Pediatric Quality of Life InventoryTM (PedsQL™) 3.0 Cardiac Module

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Background: Rheumatic fever (RF) and rheumatic heart disease (RHD) are important causes of acquired cardiovascular disease in children that are still main public health problems and can affect various aspects of health such as physical, psychosocial, and academic. The assessment of the quality of life in children with RF and RHD, as well as the factors that affect their quality of life, are important for the identification of problems and the monitoring of responses of therapy for a comprehensive management.

Purpose: (1)To identify the quality of life children with RF and RHD (2) To analyze sociodemographic and clinical factors that affect quality of life in children with RF and RHD.

Materials and Methods: A cross-sectional study was conducted on RF and RHD patients aged 5-18 years old and their parents using PedsQLTM 3.0 Cardiac Module questionnaire and retrospective medical records from April 2017 until August 2017. A convenient sample of 100 patients was selected from an outpatient clinic of the pediatric cardiology department in 3 teaching hospitals in Jakarta, Indonesia. Factors that proved to be significant on the univariate analysis were subsequently tested using multivariate analysis.

Results: High quality of life was found in 53% (child-report) and 52% (parent-report) of subjects. Median score from children's reports and parents' reports are, 79,70 (29,7-100), and 77,31 (45,03-99,40) respectively. Clinical factors affecting quality of life included the route of antibiotic administration, and there were no sociodemographic factors. By child-report, children with RF and RHD who received intramuscular antibiotics were 3.2 times more likely to have higher quality of life than children who received oral antibiotics (p <0.05, OR 3.208 and 95% IK 1.391-7396).

Conclusion: More than half of children with RF and RHD had a high quality of life. The route of antibiotic administration was the only factor affecting quality of life. Those who received intramuscular administration of antibiotics had a higher chance of having high quality of life compared to those who received oral antibiotics.

ID: 275

Characterization of the Pain Experience at the Age of 10 Years in a Portuguese Birth Cohort - Generation XXI

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Introduction: Pediatric pain has been considered an important public health issue which motivates studies about a wide variety of dimensions around the world. Although epidemiological studies have been increased over the past years, the information to characterize pediatric pain from population-based studies is still limited.

Purpose: We aim to identify the prevalence, gender distribution and characterization of pain experience in children of the Generation XXI birth cohort (G21) at the age of 10 years.

Materials and Methods: Retrospective descriptive study of G21 participants assessed at the age of 10 years who answered questions related to pain (Portuguese version of the Luebeck Pain Screening Questionnaire, applied to parents and children), between 2015 and 2017. It was also used a face scale from 1 to 6 (no pain to severe pain) to try to quantify the intensity of pain among children.

Results: Of the 6392 participants, 55% had pain throughout their lives and 42.7 % reported pain in the previous 3 months. Pain was more frequent among girls (58% of girls vs 51% of boys) (p<0.001). The reported pain in the previous three months had also higher frequencies among girls (45.4 % of girls and 40.7% of boys) (p = 0.013). In general, the main anatomical regions were head (20%), abdomen (17%)

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and legs (12%). The location of pain differs by gender ($p < 0.001$): headache and abdominal pain were the most implicated locations of pain among both gender, but girls implied pelvic pain more frequently (12%) and boys presented more pain complain in legs (15%). We didn't identify statistical differences in frequency and intensity of pain by gender distribution ($p = 0.3$ and $p = 0.7$, respectively). More than 65% reported pain lasting more than 3 months of evolution and 39% reported duration longer than 12 months. In 20% of the children the pain occurred more than once a week, in 23% once a month and in 25% occurred 2-3 times a month. Concerning the intensity, 9% of the participants reported pain intensity of 6 in face scale (maximum) and 61% mentioned pain intensity between face 3 and 4. There were no significant differences by sex in the intensity or frequency of reported pain. The majority of the participants (51.1%) reported never having taken medication or having consulted the doctor as a consequence of the pain (51.1% and 56.3%, respectively). However, 15% of children missed school due to pain. In 44.2% the pain appeared for no apparent reason and 68% had no associated medical diagnosis. A family history of pain was reported in 50% of the children.

Conclusion: In this population-based study in Portugal, the overall prevalence of pain was higher in girls. The location of pain differs by gender too. We didn't identify statistical differences in frequency and intensity of pain by gender. Although the regions most frequently referred to in G21 are those described in other studies, the frequency of chronic and severe pain was higher in our cohort.

ID: 258

Rheumatic Carditis in Acute Rheumatic Fever in a High Income Country: a 12-years Single Center Experience in a Northern Region of Italy

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Introduction: Acute rheumatic fever (ARF) is a multisystemic non-suppurative disease resulting from an autoimmune reaction usually caused by group A streptococcal (GAS) pharyngitis. It mostly affects children aged 5 to 14 years. After the acute phase, all the clinical features of ARF resolve completely apart from valvular lesions that can become chronic and are known as rheumatic heart disease (RHD). Italy is a High-Income Country (HIC), but the incidence from different reports is above the threshold value for low-risk populations of 2 out of 100.000/year, defined by the 2015 revision of Jones Criteria.

Purpose: Describe the clinical presentation of ARF and the presence and characteristics of carditis at the time of diagnosis in a pediatric population living in a HIC over a 12-years period.

Materials and Methods: A single center retrospective chart analysis involving all consecutive patients diagnosed with ARF between January 2003- September 2015 at Pediatric Departments of Sant'Orsola-Malpighi Hospital in Bologna, Italy. Diagnosis of ARF is made according to the American Heart Association Revised Jones Criteria of 2015. Each patient's age, sex, clinical characteristics, recent medical history for pharyngotonsillitis and antibiotic treatment, echocardiographic findings at diagnosis were recorded.

Results: A total of 98 patients (Male/Female rate 1.7) were included with mean age at diagnosis of 8.81 ± SD 3.04 years. Carditis was the second most frequent finding (57.1%), following arthritis (69%). Mitral regurgitation was detected in 87.5%, aortic regurgitation in 64.3% and mitral plus aortic regurgitation in 51.8%; valve stenosis was absent as major cardiovascular complication. Carditis was clinically silent in 25% of patients. Only 60.2% of patients reported a positive history of pharyngotonsillitis; among these, 81% had received antibiotic treatment for pharyngotonsillitis: 58.3% of them had carditis at the diagnosis of ARF.

Conclusion: ARF has not disappeared from HICs and pediatricians must be aware of it, especially after GAS pharyngitis. Diagnosis and treatment of GAS pharyngitis is pivotal to stop the development of ARF, but unfortunately our data show that streptococcal pharyngitis can be silent and ARF can develop despite antibiotic treatment. Carditis is present in about 60% of patients at the diagnosis and mitral regurgitation is the most frequent finding. Echocardiography plays a crucial role in the diagnosis since 25% of carditis was clinically silent in our cohort. In contrast to Low-Income Countries, in our cohort valve regurgitation was the only presentation of rheumatic carditis and no cases of valve stenosis occurred, probably because of an earlier diagnosis.

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An Investigation into Factors that Affect the Decision of Parents to use Blended Diets with their Gastrostomy-Fed Children

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Introduction: Children, who are unable to swallow safely, have gastric problems or neurological difficulties may be unable to gain sufficient calories and nutrients by oral intake alone. Such children may require tube feeding via a gastrostomy to meet their nutritional requirements. Usually commercial formula feeds are used to feed these children. However, more families are opting to use blended diets i.e. everyday family meals or food that is blended to a smooth consistency and then passed down the feeding tube; these diets are known as blended diet. The use of blended diet is an area of controversy; many parents 'extol the virtues' of blended diets whist dieticians may be unsupportive and advise against the practice. NHS policy strives to achieve patient centred care through joint, planning and decision-making; the findings of the study indicate that this is not being achieved with regards to blended diet.

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Method: A mixed methodology was used in the study, with three phases, the first two being qualitative using thematic analysis with data collected from in-depth interviews and blog posts. The information from phases 1 and 2 informed the content of the survey used in phase 3. The third phase of the research is the quantitative phase. A survey was designed and distributed to families who are and are not using blended diet. This enabled the researcher to gauge the prevalence of the viewpoints/ themes from the interviews. The strength of the relationship/correlation between these views and other variables such as parental age and level of education were also analysed.

Results: The study revealed a mismatch between the priorities of families and those of clinicians, which was also identified in the literature. A change in the locus of control was noted, with parents being reluctant to 'admit' to clinicians that they were using blended diets, combined with the sense that dieticians had less control over the intake of a child who was being fed a blended diet. The quantitative phase indicates that parents who opt to use blended diet have a significantly higher level of concerns about commercial formula and see less need for it. These parents also have more misgivings about the overuse of medicines in general. The qualitative phases reveal anecdotal evidence suggesting blended diets have physiological benefits, some of which are reinforced by the quantitative data. However, these data are all patient (parent) reported and more large scale and objectives studies are required.

ID: 167

Hepatic Mass or Otherwise?

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Introduction and Purpose: Abdominal ultrasound is non-invasive, easily accessible and can open unexpected doors into a varied pathology.

Materials and Methods: We present three cases from the Pediatrics Department of "Grigore Alexandrescu" Hospital, patients with minimal/no symptomatology with suspected hepatic mass on a random abdominal ultrasound.

Case description: Case 1: 3 year old boy admitted for investigation after a heterogeneous lesion was described in the right hepatic lobe. He had a hard epigastric mass. Abdominal ultrasound showed a giant, polycyclic tumor passing over the midline. CT localized it in the retroperitoneum. Neuron-specific enolase was 70x normal. There was bone marrow invasion. Pathology confirmed neuroblastoma. Case 2: 4 year old boy presented with abdominal pain. On inspection there was bulging of the right hypochondrium, collateral circulation. A hard liver could be felt. Ultrasound showed an extensive mass in the right hepatic lobe. CT confirmed the hepatic tumor invading the inferior vena cava up to the right atrium and described secondary neo formations in the lungs. The alpha-fetoprotein was 105x normal. Pathology confirmed hepatoblastoma. Case 3: 9 year old boy admitted with vomiting, diffuse abdominal pain, fever. Four months before he was treated for pneumonia with pleurisy. Lab tests showed leukocytosis, neutrophilia, marked inflammatory syndrome. Ultrasound and CT described heterogeneous hepatic masses and hilar adenopathy. The diagnosis of multiple liver abscesses was confirmed surgically.

Conclusion: Abdominal ultrasound doubled with CT will set a complete diagnosis on "hepatic" masses. The clinician should be aware that not everything is what it seems at first sight.

ID: 232

Bilious Vomiting in Newborn: The Role of Upper Gastrointestinal Contrast Study

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Introduction: Bilious vomiting within first days of age should be considered as a sign of bowel obstruction until proven otherwise. The gold standard investigation is an upper gastrointestinal (UGI) contrast and most of the babies will have it performed as it is difficult to exclude intestinal obstruction/malrotation clinically or with plain abdominal radiographs.

Purpose: To determine the frequency of surgical diagnoses with UGI contrast as mode of investigation for babies presenting with bilious vomit predominantly.

Materials and Methods: Infants more than 35 weeks gestation presenting with predominantly bilious vomits within 7 days of birth and having had a UGI contrast were included. UGI contrast study reports were recorded and correlated to incidence of surgery and surgical findings.

Results: 172 infants admitted or transferred to our neonatal unit in view of bilious vomiting were investigated with an UGI contrast study between December 2011 and December 2016. Four different symptoms at presentation suggestive of surgical pathologies were noted as shown on table1 but mostly with bilious vomit and none were intubated and ventilated. There were 13 (7.5 %) abnormal UGI contrast images and all of them underwent laparotomies. Of these babies 11(6%) had abdominal surgical pathologies and 2 had normal findings. (Table 2) Out of a total of 13 infants who had laparotomies, 7 babies had diagnosis of malrotation (5 with volvulus), 1 ileum atresia, 1 Hirschsprung's disease, 2 other findings (enlarged bladder compression, resulting in symptoms of bowel obstruction and aberrant mesenteric vessels crossing D3, causing compression) while two were normal. Positive predictive value for UGI contrast studies was 84%. The sensitivity of UGI contrast study to detect bowel obstruction was 100%, while the specificity was 98%.

Table 1. Symptoms of patients

Bilious vomits/aspirates	152
Bilious aspirates	16
Abdominal distention	36
Bloody stool	4
Hematemesis	2

Table 2. Correlation contrast imaging to surgical diagnosis

Imaging	Malrotation/volvulus	Surgical cause identified	No surgical cause identified
Abnormal contrast study (n = 13/172)	7	4	2
Normal contrast study (n = 159/172)	0	0	159

Conclusion: In our study very few babies with bilious vomiting are shown to be associated with malrotation ± volvulus. However, UGI contrast study in view of its high sensitivity and good positive predictive value is a crucial mode of investigation and should always be performed in order for intestinal obstruction not to be missed. The numbers reported can be useful for clinicians and paediatric radiologists to triage time critical transfer or urgency of investigation.

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Evaluation of Adhesion Molecules in Children with Community Acquired Pneumonia

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Introduction: Globally, pneumonia is the most common cause of death in children younger than five years of age. Discrimination of the cases with severe and mild pneumonia is crucial due to the requirement of hospitalization, as well as additional management and treatment protocols. In case of tissue inflammation endothelial adhesion molecules are expressed on the endothelium and released into blood stream.

Purpose: In this study we aimed to analyze the role of IL6 (Interleukin), IL8, IL10, VCAM-1 (soluble Vascular Cell Adhesion Molecule) and sSELE (soluble E-Selectin) in the diagnosis and prognostic evaluation of pneumonia.

Methods: The study was conducted in Hacettepe University Ihsan Dogramacı Children's Hospital, between January 2016 and January 2018. Patients who were between 1 month-18 years of age and admitted to outpatient clinics and emergency department with clinical signs of pneumonia were involved in the study and classified as mild and severe disease. Patients with severe pneumonia (SP) were hospitalized and patients with mild disease (MP) were treated in the community. IL6, IL8, IL10, VCAM-1, and sSELE levels of the patients were investigated and compared with the age- and gender-matched healthy subjects.

Results: A total of 113 patients fulfilling the criteria for a diagnosis of community-acquired pneumonia (CAP) were enrolled in the study, 62 (54.8%) of which had SP and 51 (45%) had MP. Control group consisted of 61 healthy controls. MP and SP groups were significantly different in terms of IL8, IL10 and sSELE levels (p=0.019, p=0.013, and p=0.02, respectively). Patients with SP and MP had significantly different WBC, ESR and CRP values (p<0.001, p=<0.001, and p=<0.001 respectively), as well.

Conclusions: Besides classical acute phase parameters, inflammatory response parameters such as IL6 and VCAM-1 levels may be helpful in diagnosis of pneumonia. In terms of determination of disease severity in pediatric pneumonia, systemic inflammatory markers like IL8 and IL10 and adhesion molecules like sSELE seem useful in clinical settings.

ID: 138

Factors Associated with Delayed Vaccination in Children

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Background: Complete and timely childhood vaccination is one of the most cost-effective interventions in improving child survival. Delay in receipt of vaccination might result in a child being susceptible to vaccine-preventable diseases. Identification of factors which contribute to delay in receipt of vaccination will help in developing targeted interventions.

Objective: The present study was conducted to assess the reasons for the delay in vaccination in children below 6-years-old and to determine the factors influencing the timeliness of vaccination.

Method: A cross-sectional study was conducted at the National Guard Comprehensive Specialized Clinic in Riyadh, Saudi Arabia. The study population consisted of 1000 mother-child pairs attending the Well Baby Clinic. Data was collected by direct interview using a predesigned questionnaire.

Results: Out of the 1000 study subjects, 224 (22.4%) had presented late for vaccination. The most common reason for the late presentation was that the child was ill on the scheduled day of vaccination. The higher level of maternal education and working mother were found to be statistically significantly associated with delayed vaccination.

Conclusion: The higher level of maternal education and working mother are significantly associated with delayed vaccination. These mothers need more health education on the importance of timely commencement of vaccination to ensure timeliness of receipt of doses of vaccines.

ID: 110

Incidence of Chlamydia,Gonorrhea, and Azithromycin Resistant Chlamydia in Adolescent Population

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Introduction: Our practice sees women of all ages. In this retrospective analysis, we looked at our population of adolescents, including ages 12-17. All patients received gonorrhea and chlamydia testing on at least one occasion. In a retrospective chart review we reviewed 25 charts

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of children in this age group and compared the incidence, demographics and frequency of Azithromycin resistant chlamydia in a randomized matched subset of "control" adult charts.

Purpose: We set out to see if adolescent women in our practice were at higher risk of contracting gonorrhea and chlamydia, and when they do contract these disease, we sought out to see if they would be at higher risk than our adult population of acquiring strains that were resistant to common treatments, most notably azithromycin.

Materials and Methods: We performed a randomized retrospective chart review of 42 pediatric patients seen at our offices. All of these patients received gonorrhea and chlamydia testing one at least one occasion in our offices. We then matched this group with an equal number of adult patients that were seen in our offices during the same time period, for similar symptomology, (or lack thereof.) We compared gonorrhea and chlamydia rates in the two populations and the difference in rates of drug resistance in those with positive tests.

Results: We found a slightly decreased rate of infection with gonorrhea and chlamydia in our test population of pediatric patients (2% vs. 4%). We also found a zero percent rate of resistance to antibiotics in our pediatric population, compared to a low, but statistically significant higher rate in our matched adult cohort group.

Conclusion: Our data sample is small, but initial evidence suggests that the infection rate of adolescents with gonorrhea and chlamydia may be lower than the adult population when presenting to an urban Obgyn practice with similar symptomatology. When they are positive, there may also be a lower rate of drug resistant strains. Logically, this follows that fewer and less virulent strains may be associated with the adolescent population as opposed to the adult population. This data in no way compromises the value of sexual education counseling provided to pediatric populations, but useful when counseling young women who may be concerned that adolescent experimentation may have affected their fertility. We plan to continue our analysis with a prospective cohort study to achieve higher quality data on the subject.

ID: 102

Measles - A comeback in Bulgaria, claiming victims among children

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Introduction: Despite the large measles outbreak in Bulgaria, 2009-2011, vaccination coverage has remained unsatisfactory. The result was healthcare system taken by surprise when measles came back in spring 2017.

Purpose: To present epidemiological characteristic of measles cases in Plovdiv region.

Materials and Methods: All measles cases admitted to infectious diseases department, University Hospital, Plovdiv, Bulgaria, were included. Confirmation was made by detection of specific IgM and/or nucleic acid.

Results: Overall, 141 measles cases were reported between 15 March and 16 July 2017. They comprised 85,45% out of 165 cases in the country. In total, 115 (81,56 %) were children of which 112 were laboratory confirmed and 3 probable with epidemiological link to a confirmed measles cases. The median age was 2 years (2 months -18 years). The majority (96,52 %) were from a minority background. The transmission had occurred in the community (117 cases) and hospital settings (20 cases). Vaccination data showed that 47(36,88%), were unvaccinated, including 36 infants aged <13 months (ineligible for vaccination), another 48 (35,46%) had received 1 vaccine dose, 14 (12,6%) 2 doses and for the remaining 2 (15,6%) cases vaccination status was unknown. Genotype B3 was identified in 27 specimens. One death occurred in a 9-month-old child. The remaining cases recovered completely.

Conclusion: To achieve measles elimination, immunization adjusted strategies should be directed ate Roma community, with broader involvement of cultural mediators. Vaccination campaign targeting all infants aged six months and older would probably curtail the outbreak sooner.

ID: 125

Mycoplasma Pneumoniae Encephalitis - Infectious or Immune-mediated Disease?

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Introduction: Encephalitis is an inflammation of the brain that can have numerous etiologies, both infectious and non-infectious, with similar presentation. Mycoplasma pneumoniae is a frequent agent for respiratory disease, although extrapulmonary complications are not uncommon, but encephalitis is rare in children. Many of these nonrespiratory disorders are postulated to be the result of immune reactions, as well as of direct lesions.

Case Description: A previously healthy 15-year old male, presented with odynophagia, headache, vomiting and fever 7 days before evolving to altered mental status (Glasgow 13) and worsening of his general condition. He was admitted with the clinical diagnosis of meningoencephalitis, under acyclovir, ceftriaxone and ciprofloxacin. The EEG and Head-CT scan were normal but the cerebrospinal fluid demonstrated a pleocytosis (53,0/µL) with predominant mononuclear cells, normal glucose levels and mildly elevated protein levels (50,5 mg/dL). The lumbar puncture opening pressure was 23 cmH2O. There was intrathecal synthesis of immunoglobulins (Link-Tibbling index elevated for IgG and IgM). Positive PCR in respiratory secretions and serology for Mycoplasma pneumoniae in serum (IgM and IgG) were positive in blood, but negative in cerebrospinal fluid. Ten days after the onset of this disease, he developed a paralysis of the VI cranial nerve, with convergent strabismus of the right eye and diplopia. The Head-MRI demonstrated a T2 and FLAIR hypersignal of the pyramidal tracts bilaterally and of the parietal and cerebellar white matter, which evoked a demyelinating disease. He underwent treatment with daily pulses of methylprednisolone for 5 days, and evolved favorably, with complete resolution of clinical symptoms and signs.

Conclusion: Mycoplasma pneumoniae is able to invade the central nervous system, however failure to detect it from cerebrospinal fluid by serology or PCR in the diagnosis of mycoplasma encephalitis has been reported. This opens the discussion about the direct pathogen invasion versus immune mediated lesions that has implications in treatment options.

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Oxidant and Antioxidant Balance in Children with Community-Acquired Pneumonia

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Objective: There is a crucial balance between oxidant and antioxidant defense mechanisms. We aimed to evaluate the role of the balance of these systems in the pathogenesis and prognosis of community-acquired pneumonia (CAP) in children.

Methods: We analyzed oxidant and antioxidant stress parameters from serum samples with clinical and demographic data of children with CAP and also compared with age- and gender-matched healthy controls between 2016 and 2017. Serum levels of the total antioxidant status (TAS), total oxidant status (TOS), oxidative stress index (OSI), ischemia-modified albumin (IMA) and plasma thiol levels were evaluated and compared among groups.

Results: A total of 160 children were evaluated, 106 of them had pneumonia with two groups, including 54 outpatients and 52 inpatients and the remaining 54 were healthy subjects (third group). White blood cell (WBC) and C-reactive protein (CRP) levels were significantly higher in inpatient group than the others (p= 0.02 and p= 0.001, respectively). The mean TAS values were 1.6±0.2 and 1.6±0.3, and 1.3±0.2 mmol Trolox equiv./L in outpatients, inpatients, and healthy subjects, respectively with a significant increase in patients (p= 0.001). However, there was no statistically significant difference in TOS values between patients and healthy controls (p= 0.06). The mean serum IMA levels were 0.5 ± 0.1 ABSU in outpatients, 0.7 ± 0.1 ABSU in inpatients, and 0.6± 0.08 ABSU in control group and the difference among those three groups was statistically significant (p= 0.001). The native thiol levels (NTL) were 410 µmol/L, 346 µmol/L, and 361 µmol/L in outpatient, inpatient, and control groups, respectively. The total thiol levels (TTL) were 450 µmol/L, 392 µmol/L, and 411 µmol/L in outpatient, inpatient, and control groups, respectively. Total thiol and native thiol levels were significantly lower in inpatients group as compared with the control and outpatient groups (p=0.004 and p=0.005, respectively). Catalase (CAT), myeloperoxidase (MPO), and ferroxidase enzyme activities of patients were higher in patients with pneumonia than controls (p=0.003, p=0.02, and p=0.02, respectively).

Conclusion: Parameters that give an idea regarding with antioxidant capacity including TAS, CAT, MPO, and ferroxidase may be useful for the diagnosis of pneumonia. Acute phase reactants including WBC and CRP are still important conventional parameters to predict the disease severity. Both thiol homeostasis parameters and IMA level seem likely to be influenced by disease severity. Our results suggest that plasma thiol levels and IMA may be good candidate biomarkers to predict the severity of pneumonia in children.

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ID: 225

Positive Blood Cultures in a Level II Pediatrics Department: 2007-2016

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Introduction: Fever is a common complaint in pediatric age and sometimes requires the performance of blood cultures. With the introduction of new vaccines, the most frequently isolated organisms have changed throughout the years.

Purpose: To identify positive blood cultures obtained in our Pediatrics department between June 2007 and December 2016, to describe the most significant pathogenic agents and to correlate these findings with the patient's age, vaccine status, diagnosis and prognosis.

Materials and Methods: A list of positive blood cultures in children aged 29 days to 17 years and 364 days during the study period was obtained from our laboratory. The results were classified as likely contaminants, likely pathogens or potential pathogens, based on species, number of positive blood cultures in the episode and patient's medical history. Data was collected retrospectively for patients with likely and potential pathogens. Statistical analysis was conducted using IBM SPSS Statistics 24.

Results: A total 659 positive blood cultures were identified - 518 contaminants, 132 likely pathogens (113 disease episodes) and 9 potential pathogens (7 episodes). The most frequently isolated pathogens were Streptococcus pneumoniae (31.0%), Staphylococcus aureus (20.4%), Escherichia coli (12.4%) and Neisseria meningitidis (8.8%). All potential pathogens were coagulase negative Staphylococci; in 2 cases the organism was isolated twice in the same episode, 3 occurred in immunocompromised children and 2 in children with medical devices. The median age at diagnosis was 22 months, 56.6% of cases occurring before 36 months of age. The most frequent diagnosis were pneumonia (29.4%), occult bacteremia (22.9%), urinary tract infection (11.0%) and meningitis (11.0%). Approximately 59% of patients had at least one dose of any pneumococcal conjugate vaccine and 2.7% at least one dose of meningococcal group B vaccine. No antibiotics were prescribed in 17 cases, all with favorable outcomes. Only 1 patient died (occult bacteremia due to Enterococcus faecalis).

Conclusion: The most frequently isolated pathogen was Streptococcus pneumoniae. This may be explained by the fact that pneumonia was the most frequent diagnosis, 70.6% of cases of pneumococcal bacteremia occurring in that setting. Also, most cases occurred before the 13-valent pneumococcal conjugate vaccine became available in Portugal (2010). We describe 7 cases of possible coagulase negative Staphylococci bacteremia. Most studies have chosen to consider such cases as contaminants. However, the fact that they were isolated more than once in the same episode or in children with relevant medical history may indicate a pathogenic role, as described by other authors.

ID: 178

Microbiological Flora Different Biotopes Monitoring in Oncohematological Patients and Analysis of Antibiotic Resistance.

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Introduction: At present, the resistance of microorganisms is confirmed for different classes of antibiotics applied for various infectious diseases treatment. This problem affects both highly developed and industrialized countries and developing countries alike, as multiple resistance may ultimately lead to fatal consequences.In this regard, the description of the microflora taxonomic structure of different biotopes in oncohematological patients during the period of 2017 with the detection of the resistance to the antibacterial drugs used is of particular relevance. The taxonomic structure of various biotopes microflora in oncohematological patients is presented in the article.

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Conclusion: Received data indicate that the main causative agent of infectious complications in patients was gram positive bacteria.All types of isolated microorganisms revealed the greatest sensitivity to antibiotics of the carbapenem class and high sensitivity to the 3rd generation cephalosporins and fluoroquinolones. Dynamic monitoring of the microbial environment provides the opportunity to create our own base of antibiotic resistance, which will allow to control the level of the main pathogens resistance to the antibiotics used.

ID: 251

Human Papillomavirus (HPV) and The HPV Vaccination in Teenage Boys: Parental Knowledge and Acceptance

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Introduction: Currently, in Portugal, the Human Papillomavirus (HPV) vaccine is available in National Vaccination Programme (NVP) free of charge only for girls. However, the vaccine is effective in boys and is recommended by the Portuguese Society of Paediatrics. The present study aims to explore parents and guardians of teenage boy's knowledge about HPV and the HPV vaccine. A self-reported questionnaire was applied on parents and guardians of boys aged 8-18 years old, attending to pediatric medical appointments or pediatric emergency department of a portuguese local hospital. The questionnaire asked for basic socio-demographic information, attitudes towards and knowledge about HPV and HPV vaccination. Statistical Package for Social Sciences (SPSS) version 24 was used for statistical analysis.

Results: The questionnaire was answered by 105 parents and guardians, aged between 26-57 years (M=42,27; SD=5,479). 69,5% had heard about HPV, of these 43,8% only knew that HPV can cause cervix cancer, although 64,3% recognized that HPV could affected both genders. 58,9% answered that HPV was sexually transmitted and 68,5% said the best way to prevent infection was vaccination. Overall, 84,5% of participants had heard about HPV vaccination and 56,2% considered the vaccine safe. As for the will to vaccinate their sons, 41% of participants `willing without doubt` for their son to receive HPV vaccine, 51% `willing only if the doctor recommends´ and 3,8% `not willing`. Mothers had shown to know more about HPV vaccine (heard about HPV vaccine (p<0.01) knew the vaccine is on the NVP only for girls (p=0,001), knew the correct time for vaccination (p=0,018), and considered vaccine safe(p=0,033), when compared with fathers. Parents with higher education had shown to know more about the best time for vaccination (p<0,01) and had heard more about HPV (p=0,014)).

Conclusions: Most of the parents in our study reported having heard of HPV, and for those, their knowledge about the health sequelae of HPV for men was poor compared to their knowledge of its impact in women. However, most parents considered vaccinate their sons. It is necessary to improve public education about the potential impact of HPV on male health to facilitate acceptance and decision for vaccination.

ID: 189

Results of Monitoring of Infection Caused by Group B Streptococcusin Newborn infants and Pregnant Women in 2012-2018 Years.

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Introduction: The Streptococcus of Group B (SGB) is found in 10-35% of healthy men and women. The main representative of this group is S. agalactiae. Today in the developed countries SGB enters into the three of leaders causing infections in newborns.

Purpose: To study the frequency of SGB infection at pregnant women in area, timing of disease manifestation, clinical symptoms and outcomes at newborns. To estimate in general efficiency of the monitoring and the compare with data in other countries.

Materials and Methods: We analyzed results of screening from 2012 – 6 months 2018. Bacteriological screening at pregnant women included: rectal and vaginal smear, analysis of urine in the term of 35-37 weeks of pregnancy. Examination of children: contents of the stomach, peripheral blood and skin. We used the cultural and an express bacteriological methods. In total for this period 58619 pregnant women were examined. Frequency of positive results annually fluctuated and made from 228 in 2012 to 576 in 2016.

Results: SGB colonization in the urogenital path at pregnant women averaged 7%, clinical forms were diagnosed for 29 newborns (64% among all positive cases). In a half (52%) of cases infection at the child, mothers were SGB and pregnancy problems (55%), in 15% of children the delay of prenatal development was registered. Girls and boys made approximately identical quantity – 52% and 48%, average body weight at the birth made 3175g. The SGB early forms made 59%, late forms - 41%. Structure of pathology: encephalomeningitis and bacteremia –31% each, sepsis - 21%, 17% there was a clinic of pneumonia. The SGB early forms were presented mainly by sepsis and pneumonia, among the late form - encephalomeningitis. In blood tests of children with early forms the combination of a leukopenia, a neutropenia and thrombocytopenia was characteristic, the grows of level of C-protein was registered by 3rd days of a disease. Positive bacteriological results in 41% of cases were received from cerebral fluid, in 59% - from blood, from urine in 45% of cases, 10% of children had positive cultures from both biological environments, 55% - from skin, from a stomach - in 48% of cases. In the disease outcome three children died (10%), 38% of children still had neurological symptoms.

Conclusion: Our monitoring suggested, that SGB colonization of pregnant women in our area made 7% that below, than in other countries, frequency of development of the SGB clinical forms in newborns made 0,5 on 1000 that is similar in Germany, but below than in the USA and other countries of Europe. Clinical forms among SGB carriers of an infection made 64%, that is slightly higher in comparison with other countries. Most of sick children were full-term, early and the late forms of an infection made almost equal shares. Early manifestations of SGB infection were presented by pneumonia and sepsis, late manifestations at most of children were by clinic of a meningoencephalitis. Level of a mortality was comparable with results of other authors, made 10%.

ID: 212

Malaria Case Management in Sudan

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Background: According to the latest World Malaria Report, released in November 2017, there were 216 million cases of malaria in 2016, and 445 thousands deaths worldwide. Africa accounts for 91% of cases and 93% of deaths (WMR, 2017). In Sudan malaria represents 9.3% of

ORAL PRESENTATIONS: INFECTIOUS DISEASES

outpatient clinic visits and approximately 8.7% of hospital admission. The estimated number of cases ranged between 855,000 and 2,222,000 (average of 1,305,000) and the estimated deaths ranged between 130 and 8,000 in 2016 (average of 4000).

Purpose: To identify the progress in malaria case management and the main challenges facing malaria treatment in Sudan.

Methods: Information and data tackled was collected from: Published studies from Sudan through search of online database, published data that not online were collected from authors when possible. Official unpublished documents were copied from Ministry of Health. Other sources where from Sudan Malaria Indicator Survey MIS 2016, WHO World Malaria Report 2017 and WHO malaria program review data.

Results: In Sudan, chloroquine was the most frequently used drug for falciparum malaria for more than 40 years. Since 2004, treatment of uncomplicated malaria in Sudan has changed from mono-therapy to artemisinin-based combination therapy (ACT), using the co-blister of artesunate + sulfadoxine/pyrimethamine (AS+SP) and artemether + lumefantrine (Al), as first- and second-line, respectively. By end of 2016, evidence from antimalarial drugs efficacy studies through 2011 – 2015 (Adeel et al, 2015; FMOH, 2015; Mohamed et al, 2017; WWARAN 2015) showed declining efficacy of AS+SP. This leads to shift from AS+SP to AL as first line for treatment of uncomplicated malaria and introduction of Dihydroartesiminine-Piperaquine as second line for treatment of uncomplicated malaria. Regarding severe malaria artemether was used for management for many years but due to the irrational use of artemether injections for treatment of uncomplicated malaria (Mannan AA et al), introduction of Artesunate injection for treatment of severe malaria side by side with Quinine injection and banning use of Artmether injection was recommended since 2017.

Conclusion: The persistent challenges to malaria treatment in Sudan are the decreasing drug efficacy and irrational use of drugs resulting from non adherence to treatment guidelines and possibly non compliance of patients .

ID: 200

Understanding Factors associated with Parents' Decision to Vaccinate their Offspring with Recombinant Meningococcal Vaccines (MenB/MenC).

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Introduction: Despite its effectiveness in preventing invasive meningococcal disease (IMD), paediatric uptake of recombinant meningococcal vaccination for MenB and/or MenC is low in Italy.

Purpose: This study aimed to investigate knowledge, attitudes and practice (KAP) about IMD and the relative vaccines in a sample of Italian parents.

Materials and Methods: A cross-sectional study was conducted from June to July 2017 among a sample of 607 subjects participating to a Facebook discussion group on paediatric vaccinations. A self-administered anonymous web-based questionnaire was used to collect demographics, KAP and preventive measures, perceived risk for contracting meningitis, attitude towards the utility of meningococcal vaccine, and willingness to receive / perform a meningococcal vaccine. Questionnaire included a specifically designed knowledge test (18 items) on IMD and vaccine related issues. Factors associated with meningococcal vaccination in the offspring were included in a regression analysis model in order to calculate Odds Ratios (OR) with their respective 95% Confidence Intervals (95%CI).

Results: In total, 307 of 607 parents returned a completed questionnaire for a response rate of 60.6% (mean age 37.8 ± 10.2 years, 72.8% females). Meningococcal infection was identified as a severe or highly severe one by most of participants (92.3%), while it was recognised as frequent/highly frequent in the general population by 20.0% of respondents. Overall, 69.8% of participants reported 60% correct answers or more at knowledge test (median 13/18, actual range 0/18 - 18/18). More specifically, the majority of participants (75.7%) knew that vaccination reduces spread of bacterium, that early symptoms of IMC are not specific (63.0%), and that mortality of meningococcal meningitis is around 30%, irrespective of therapy (58.0%). Even though 77.7% of participants was somewhat favourable to MenB/MenC vaccines, offspring's vaccination towards MenB and MenC was reported by only 22.6% and 31.5% of participants, respectively. Positive parental attitude, their previous vaccination, as well as perceived severity and frequency of IMD, better knowledge of IMC issue were significantly associated with offspring vaccination, while only knowledge status was a significant predictor at multivariate analysis (OR 1.755, 95%CI 1.005 - 3.066).

Variable	Vaccination status		p value	Odds Ratio (95% Confidence Interval)
	Pos. (108, 35.4%)	Neg. (197, 64.6%)		
Parent's favourable attitude (MenB/MenC)	12, 11.1%	56, 28.4%	0.001	1.334 (0.463; 3.846)
Parent's Previous vaccination (MenB/MenC)	27, 25.0%	90, 45.7%	< 0.001	0.730 (0.380; 1.403)
IMD perceived as a severe disease	105, 97.2%	176, 89.3%	0.014	2.295 (0.594; 8.874)
Knowledge Score > median	64, 59.3%	71, 36.0%	< 0.001	1.755 (1.005; 3.066)
Vaccinate perceived as useful to avoid VPD infections	60, 55.6%	73, 37.1%	0.002	0.766 (0.444; 1.321)
Vaccinate perceived as useful to avoid VPD complications	82, 75.9%	113, 57.4%	0.001	0.624 (0.349; 1.117)
MenB/MenC vaccine recommended by an HP	16, 14.8%	14, 7.1%	0.031	0.538 (0.241; 1.201)
Fear of additives in vaccine formulation	8, 7.4%	32, 16.2%	0.029	0.698 (0.222; 2.196)

Table 1: Multivariate analysis (i.e. binary logistic regression) of factors associated with offspring's vaccination at univariate analysis (i.e. chi squared test). Note: MenB = *recombinant vaccine against N meningitidis* serogroup B; MenC = recombinant vaccine against *N meningitidis* serogroup C; IMD = invasive meningococcal disease; VPD = vaccine preventable disease; HP = healthcare provider).

Conclusions: Vaccination rates for MenB / MenC in participants' offspring was unsatisfying. Even though IMD was diffusely perceived as a severe disease, risk perception was eventually unrelated with parents' vaccine propensity. Our results suggest that interventions aimed to improve vaccine literacy as well as official vaccine recommendations may eventually improve immunisation rates for MenB / MenC in their offspring.

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ID: 249

Does Breastfeeding, Milk Formula or Mixed Feeding during Maternity Stay Influence Neonatal Diet after Hospital Discharge?

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Introduction: International guidelines recommend exclusive breast milk feeding during the first 6 months of life and to continue its use complimented with other food types until the end of the second year of life. Some studies report that the use of milk formula in maternity wards may influence the nutritional attitudes of parents regarding their children.

Purpose: To determine if the type of milk used during newborn maternity ward stay at a Portuguese University Hospital influences the type of milk use in neonates after discharge.

Materials and Methods: Retrospective analysis of medical records of babies born during 2017 at this hospital. Demographic data were analyzed and a comparison was made between the type of milk feeding done during maternity ward stay and the neonatal feeding done after hospital discharge, reported at the first outpatient visit at the age of 2 to 3 weeks of life. The sample selection was based on newborns with outpatient visits scheduled on Tuesdays and Thursdays.

Results: In 2017, 2505 babies were born at our hospital and 491 (19.6%) were included in this study; 250 (50.9%) were male, 19 (3.9%) were premature and 7 (1.4%) were twins. The mean gestational age was 39(±1,3) weeks with a mean birth weight of 3194(±407)gr, 6 (1.2%) were small for gestational age (SGA) and 109 (22.2%) needed phototherapy. Vaginal delivery occurred in 374 (76.2%) cases, of which 140 (37.4%) were vacuum assisted, and 117 (23.8%) were born by cesarean section. During maternity ward stay 262 (53.4%) newborns were exclusively breast fed, 222 (45.2%) had mixed breast milk and milk formula feeding and 7 (1.4%) were exclusively formula fed. During the outpatient visit the data referred by parents regarding the type of feeding was respectively, 293 (59.7%), 160 (32.6%) and 38 (7.7%) ($p<0.001$, McNemar-Bowker test); 198 (40.3%) babies were exclusively breastfed since birth. A multivariate analysis by logistic regression showed an association between vaginal delivery and the exclusively breast fed neonates referred at the outpatient visit (OR=1.8 adjusted to gender, birth weight, gestational age, SGA, prematurity, multiple delivery and phototherapy need; p=0.007; 95%CI 1.17-2.80).

Conclusion: The type of milk used during the maternity stay influences the short-term parental attitude regarding newborn nutrition, being exclusive breastfeeding more prevalent during ward stay and after discharge. There was an association between vaginal delivery and exclusive breastfeeding nutrition. Staff training and parental encouragement regarding breastfeeding is the key for successfully establishing breastfeeding which is of major importance and influence on future nutrition.

ID: 160

Nutritional Disorders in Children With Life-limiting Diseases in Developing Country

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Introduction: Children who are in need of palliative care present changing challenges in nutritional care as their disease progresses. Regular nutritional assessment, the child's underlying condition, the stage of disease progression, and treatment and associated complications, as well as the child's anticipated energy and nutritional requirements, should be undertaken. The aim of the study is the assessment of the nutritional status in children with life-limiting diseases.

Materials and Methods: There are 41 children aged 3-15 years under care of the Kyiv outpatient mobile pediatrics palliative care team. We have assessed the severity of malnutrition in underweight children by weight for age chart, and pathology of gastrointestinal tract, and behavior, and oromotor dysfunction, and food`s satisfaction.

Results: Rare diseases (Duchenne muscular dystrophy, Mucolipidosis II alpha/beta, Mucopolysaccharidosis III, Epidermolysis Bullosa, Thalamic Glioma etc) were in 8 (19.5 %) children. Others 33 (80.4 %) have paralytic syndromes due to different causes – congenital, perinatal, neurodegenerative and metabolic. The distribution of children due to Growth Motor Function Classification System was following: level II – 1 (3 %), level III – 2 (6 %), level IV – 5 (15 %), and level V – 25 (76 %) children. All children have mild and moderate severity of malnutrition by weight for age (present of median 60 % to 89 %).

The chronic constipation (25 %), oromotor dysfunction (12.5%), behavior problem (25 %) were identified among children with rare diseases. The 25 % of them have special diet and 25 % have additional nutrients support. Half of them do not eat by themselves. One child has gastric tube. Satisfaction during feeding was demonstrated in 62.5 %. There were malabsorption (3 %), chronic constipation (33 %), oromotor dysfunction (67 %, p=0.008), gastroesophageal reflux disease (9 %), behavior problem (64 %, p=0.05), mental refusal to eat (36 %, p=0.05) among children with paralytic syndromes. 15 % children have additional nutrients support and 85 % do not eat by themselves (p=0.459). 21 % children with paralytic syndrome intake feeding by gastric tube and only 54.5 % of them have satisfaction.

Conclusion: Authors declare about important aspect of the feeding history in children who need palliative care and malnutrition in progressing life-limiting diseases. Further development of close relationship between caregivers and parents concerning parenting skills, knowledge about nutritional needs and ways out of difficulties is crucial for children with life-limiting states in developing country.

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ID: 177

Provision of Early and High Amount of Parental Amino Acids to Low Birth Weight Neonated at ICU i

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Introduction: Several studies have demonstrated that administration of amino acids (AAs) in the first days of life decreases protein loses and maintains a positive nitrogen balance. This study aimed to determine whether higher and early doses of intravenous amino acids would improve postnatal weight gain and metabolic control in low birth weight neonates. The researcher used an experimental design, clinical randomized controlled trial. The study was conducted in Neonatal Intensive Care Unit (NICU) at Nasser Hospital in Khanyounis. Stratified randomized sampling techniques based on birth weight (less than 2500 gm), gestational age (less than 37 weeks) and gender, followed by random allocation of neonates into control and intervention groups. The intervention group consisted of 34 neonates who received high doses of AAs (2g/kg) in the first day, increased by 0.5 gm/kg every other day until maximum dose of 3.5 gm/kg/day, and the control group consisted of 32 neonates who received standard dose of AAs (1g/kg) in the first day increased by 0.5 gm/kg every other day until maximum dose of 2 gm/kg/day. For data collection, the researcher used medical records, anthropometric measures (weight, length, and head circumference), biochemical measurements (CBC, electrolytes, serum albumin, total protein, blood sugar, serum iron and ferritin, and kidney function test). Data was collected at 3 intervals: on admission to NICU, on day three, and on day seven. Statistical analysis included frequencies, means, t test, repeated measures, and odds ratio. Mean gestational age of neonates in control group and intervention group was 32.25 and 32.35 week respectively, 50% of neonates in both groups were very low birth weight (VLBW) (>1500gm). Mean length of neonates was 39.72 and 39.81cm respectively. Mean head circumference was 29.22 and 29.74 cm respectively.

Results: After the intervention trial showed that there was statistically non significant differences in weight (P= 0.789), height (P= 0.914), and head circumference (P= 0.359) between case group and control group, while the results within groups showed that within the control group, the mean weight decreased by 94.40 gm between admission and 3rd day, decreased by 78 gm between admission and 7th day, and increased by 16.40 gm between 3rd day and 7th day, and for the intervention group, the mean weight decreased by 128.79 gm between admission and 3rd day, decreased by 83.9 gm between admission and 7th day, and increased by 44.88 gm between 3rd day and 7th day, which reflected that neonates in the intervention group who received high dose of AA (2g/kg/d) gained more weight compared to neonates in the control group who received standard dose of AA (1g/kg/d). The results also showed that neonates from the intervention group had significantly higher levels of hemoglobin, serum iron, serum ferritin, total protein, but there were no significant differences in serum albumin, random blood sugar.

Conclusion: The study concluded that administering of early and high intravenous protein to premature/ LBW and extreme low birth weight (ELBW) newborns in early postnatal life can improve protein balance, increase protein accretion and can reduce the duration of hospitalization.

ID: 255

Effects of Higher Protein Formula with Improved Fat Blend on Growth and Feeding Tolerance in Preterm Infants: a Double-Blind, Randomized, Controlled Clinical Trial

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Introduction: Preterm formulas containing greater protein:energy ratio are beneficial for non-breastfed infants, since protein is critical for promoting catch-up growth and synthesis of lean body mass. Additionally, formulas containing enriched sn-2 palmitate (sn-2) and reduced medium-chain triglycerides (MCTs) may support better feeding tolerance and nutrient utilization.

Purpose: To evaluate growth, nutritional status, and feeding tolerance of low birth weight preterm infants fed with either experimental formula (EF) containing 3.4g protein/100kcal, 12.5% of total fat as MCTs, and 40.2% of total palmitic acid esterified in sn-2 position, or control formula (CF) containing 2.9g protein/100 kcal, 30% fat as MCTs, and without enriched sn-2.

Table 1: Anthropometry results (mean ± SD) for preterm infants receiving experimental (EF) or control formula (CF)

	n	EF	n	CF	EF – CF Adjusted Means (95% CI)	p-value[1]
Weight gain (g/day) from FEF D1 until D21 (PP)	54	31.80 ± 8.70	56	29.05 ± 7.55	3.31 (0.21, 6.40)	0.037[2]
Weight gain (g/day) from FEF D1 until D21 (ITT)	68	31.44 ± 8.54	74	28.32 ± 8.71	3.09 (0.31, 5.88)	0.030
< 1500 g	32	29.36 ± 6.63	33	24.91 ± 6.04	5.64 (2.16, 9.11)	0.0027
≥ 1500 g	36	33.29 ± 9.65	41	31.07 ± 9.59	1.06 (-3.54, 5.67)	0.6457
Weight gain (g/kg/day) from D1 until D21 (ITT)	68	16.95 ± 3.78	74	15.36 ± 3.61	1.62 (0.36, 2.89)	0.012
Weight-for-age z-score at D21 (ITT)	68	-1.00 ± 0.64	74	-1.10 ± 0.76	0.14 (0.005, 0.27)	0.042[3]
Length-for-age z-score at D21 (ITT)	68	-0.80 ± 0.67	74	-0.83 ± 0.71	0.10 (-0.04, 0.23)	0.144
Head circumference-for-age z-score at D21 (ITT)	68	-0.78 ± 0.63	74	-0.75 ± 0.66	0.07 (-0.10, 0.23)	0.425

CI = Confidence Interval, FEF = full enteral feeding, D1 = study day 1, D21 = study day 21, PP = per-protocol, ITT = intent-to-treat, D35 = study day 35, D79 = study day 79.
[1]P-values are based on superiority testing (margin=0).
[2]Weight gain results analyzed using mixed effect model repeat measurement (MMRM) with covariates gender, gestational age, post-menstrual age, birth weight, weight at enrollment, and weight at FEF D1.
[3]Z-score results analyzed using MMRM with covariates gender, gestational age, post-menstrual age, z-score at baseline, and z-score at FEF D1.

Materials and Methods: Male and female preterm infants with birth weight ≤ 2000g and gestational age ≤33 weeks were recruited from a Neonatal Intensive Care Unit (NICU) at one hospital in Vietnam, and randomized in double-blind manner to receive EF (n = 80) or CF (n = 80) until reaching 3 kg body weight. Differences between groups in weight gain (primary endpoint) from day 1 (D1) of full enteral feeding (FEF) until D21 were evaluated for non-inferiority (margin = –2.5 g/d) and superiority (margin = 0 g/d). Stool consistency was rated on a 5-point scale with higher scores indicating harder stool. Feeding tolerance (including gastrointestinal symptoms and time to reach FEF) and blood / urine biochemistries related to nutritional status were assessed.

Results: Adjusted mean weight gain was 3.1 g/d greater in EF than CF; the lower limit of the 95% CI (0.31 g/d) exceeded both non-inferiority (P=0.0001) and superiority margins (P=0.030). The difference in weight gain was larger among infants <1500g (5.6 g/d; 95% CI = 2.16, 9.11). Faster weight gain in EF (vs. CF) was sustained into the post-discharge phase until D79 (mean difference up to 2.07 g/d). Differences in length-for-age and head circumference-for-age z-scores at D21 between groups were not significant. There was no group difference in the incidence of gastrointestinal disorders (EF = 21 vs. CF = 18 events), spitting-up / vomiting [EF/CF IRR (95% CI) = 0.57 (0.30, 1.09)] during D1 – D21 period, or time to reach FEF [EF = 16 (15, 17) vs. CF = 15 (13, 17) days]. Infants in the EF group tended to have softer stools [EF = 3.2 ± 0.59 vs. CF = 3.4 ± 0.58; P=0.07]. Serum Blood Urea Nitrogen (BUN) levels were slightly higher in EF vs. CF at D21 [adjusted mean (95% CI); EF = 3.10 (2.89, 3.33); CF = 2.64 (2.46, 2.83), P=0.0015], although all BUN values were within normal range (1.1 – 7.5 mmol/L). There were no differences between groups in the incidence of abnormal serum creatinine or urinary urea values.Conclusions: EF containing greater protein:energy ratio, enriched sn-2, and reduced MCTs (vs. CF) is safe, nutritionally suitable, well-tolerated, and improves weight gain of preterm infants, especially those with very low birth weight.

ORAL PRESENTATIONS: ENDOCRINOLOGY

Presentations

ID: 170

An Unusual Case of Hyperthyroidism

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Introduction: Thyroid hormone resistance (THR) is a syndrome of impaired tissue responsiveness to thyroid hormone. It is classified into three groups, namely generalised, pituitary and peripheral THR. It is usually dominantly inherited; however de novo mutations occur in approximately 22.5%. Patients have elevated serum thyroid hormone (both free thyroxine [fT4] and free triiodothyronine [fT3]) with a slightly elevated or normal thyroid-stimulating hormone [TSH] in the absence of any medication use, illness, circulating autoantibodies or hormone metabolism or transport defect. The clinical features are variable and both diagnosis and management of these patients remains cumbersome.

Purpose: To highlight the need for repeating thyroid function tests and confirming a diagnosis prior to the initiation of treatment as well as the difficulty in making a diagnosis in resource limited environments.

Case Description: An 11 year 8 month old female was referred from a peripheral hospital complaining of flu-like symptoms and vomiting. She had no fever, loss of weight, sweating, tremors, headaches nor constipation or diarrhoea. She was doing well at school however on probing was noted to have palpitations daily that worsened during exam time. She had a normal birth history. She had grommets inserted and an adenotonsillectomy done at age 8 years. On clinical examination she had a thin muscular build with no goitre, lymphadenopathy or eye signs. She hand a mild tremor of both hands but normal reflexes and visual fields. She was tachycardic with a regular pulse and normal blood pressure. No other abnormalities were noted.

Results: Electrocardiogram confirmed a sinus tachycardia. Her thyroid function tests were all elevated (TSH 3.82mIU/L, fT4 34.5pmol/L, fT3 23.1pmol/L). Investigations revealed no abnormalities in the rest of the pituitary axis. Thyroid autoantibodies were all negative. Thyroid ultrasound showed a normal sized gland with increased vascularity but no nodules. The thyroid function tests were repeated using different assays, they remained elevated. A brain magnetic resonance scan revealed no evidence of a pituitary microadenoma or other pathology. Unfortunately thyrotropin releasing hormone is unavailable in our setting (for a stimulation test) as are genetics, thus the diagnosis of THR is based on one of exclusion. The patient's symptoms improved markedly on Atenolol.

Conclusion: THR is problematic to diagnosis and the management is equally as complex. The variable resistance makes it difficult to maintain euthyroidism in all tissues. Conventional anti-thyroid drugs may be harmful and symptomatic management for the clinically hyperthyroid group remains the mainstay of treatment.

ID: 206

Design of the PESCA Study on Cardiovascular Health in School-Aged Children in Spain

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Introduction: Childhood obesity is still an important public health problem in Spain and worldwide. Apart from the effects during growth, childhood obesity has been associated with increasing the risk of suffering from chronic diseases during adulthood. Among others, data support increased rates of cardiovascular disease (CVD) and metabolic syndrome. On the other hand, school has been identified as the best place to reach children for screening and intervention studies.

ORAL PRESENTATIONS: ENDOCRINOLOGY

Purpose: To develop a protocol in which pediatricians and teachers collaborate in the prevention, early identification and treatment of cardiovascular (CV) risk factors in school children.

Material and Methods: Based on previous experience of the research group and on literature review, it was agreed that the following data should be annually collected in a longitudinal 5-year lasting study: a) Education of parents or guardians; b) Duration of pregnancy, lactation; c) family history of CVD; d) Sleep; e) sedentary lifestyle; f) Physical Activity; g) Body composition; h) Tanner stage; i) Handgrip strength; j) Cardiopulmonary auscultation; k) Weight and Height; h) Dietary habits. Parents will sign an informed written consent and all ethical aspects will be considered. In order to guarantee the confidentiality, personal data will be taken on a separated sheet and will be kept by the main researcher of the study. Each child will get a random code which will make identification impossible.

Results: After presenting the aim and protocol of the study, 3 schools from Madrid and Toledo have accepted to participate, with a total n of 1.500 children (ages 3 to 16). Children will not be randomly selected, as parents have to agree upon participation. This could introduce some bias in the socioeconomic background of the family, but will not have an influence on the methodological approach of the study and results. A pilot study will be performed in order to assure feasibility of the study. Nurses will give support to pediatricians at schools, so that exploration does not exceed one-hour time per classroom. Physical fitness will be evaluated during Physical Education (PE) classes in collaboration with PE teachers.

Conclusion: The importance of the collaboration between primary care pediatricians and teachers has not been sufficiently exploited. PESCA study will try to fill in this gap and to develop tools and algorithms to facilitate early identification of CV risk factors, in order to contribute to children's current and future health.

ID: 197

Effects of Growth Hormone Replacement Therapy on Thyroid Function of Children and Adolescents with Idiopathic Growth Hormone Deficiency

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Introduction: Growth Hormone Replacement Therapy (GHRT) constitutes the treatment of choice for patients with Idiopathic Growth Hormone Deficiency (IGHD). Some studies have shown that GHRT decreases the levels of free thyroxine (FT4) in these patients, even though the mechanism behind this phenomenon is not clear.

Purpose: To evaluate the effect of GHRT on FT4 and thyrotropin (TSH) levels of IGHD patients during the first 12-18 months of therapy. To determine the need for thyroid hormone substitution during the entirety of GHRT and its impact on height outcomes.

Methods: Retrospective analysis of IGHD cases under GHRT in a Pediatric Endocrinology Reference Center from 2006 to 2018. We collected data on body mass index (BMI), height and growth velocity (GV) standard deviation score (SDS) before therapy onset and after 12-18 months and data on IGF1 SDS, FT4 and TSH before treatment, after 6 and after 12-18 months. Data on those same parameters was collected for patients that needed LT4 substitution (at any point of GHRT) before and after its introduction.

Results: Of the 60 patients included in the analysis, 61,7% were male and the median age of GHRT start was 10 years and 9 months. We verified a statistically significant decrease in FT4 levels after 6 months of treatment, which did not persist in the following 6 to 12 months. Progressive TSH decrease was found in both evaluations. Of the 34 patients that had concluded GHRT before data collection, 10 (29.4%) presented, at some point during treatment, values of FT4 that were under the reference range for age and L-thyroxine substitution was introduced after a median 1 year and 3 months of treatment. A statistically significant increase in height was seen in these patients after the beginning of LT4 substitution. When comparing post-treatment final height SDS, no statistically significant difference was found between patients that required LT4 therapy and others.

Conclusions: While, generally, GHRT caused a decrease in FT4 levels in the first 6 months of therapy but not at 12-18 months, TSH decrease was progressive through both test periods. A significant percentage of patients needed L-thyroxine substitution at some point during GHRT and after its introduction, a height improvement was verified. In these patients, when appropriate thyroid hormone replacement therapy is established, final stature is not affected.

ORAL PRESENTATIONS: ENDOCRINOLOGY

ID: 159

Neonatal Hypoglycemia in Newborns Without Risk Factors

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Introduction: Hypoglycemia is a common problem in neonatal period associated with adverse neurological outcome and brain injury if treatment was not provided. AAP and PES recommended screening for hypoglycemia only in newborns with risk factors but many others neonates may present episodes of asymptomatic hypoglycemia without any known risk factor.

Objectives: To assess the incidence of hypoglycemia in healthy full term neonates without any risk factors in our medical center and to correlate it with mother's BMI, the initiating time of feeding and the difference between breastfeeding and formula. To prove the benefit of universal neonatal screening of hypoglycemia in saving many full term newborns without any risk factors.

Materials and Methods: A hospital based, prospective longitudinal study involving 282 healthy full term asymptomatic neonates. Blood glucose level was measured at 60 and 90 minutes of life using reagent strips and Glucometer independent of feeding time.

Results: According to the definition of hypoglycemia by the AAP (glycemia< 40 mg/dL) and PES (glycemia<50 mg/dL), the overall incidence of hypoglycemia in asymptomatic healthy full term newborns was 12,1% and 30.9% at 60 min respectively, while it was 1.1% and 17% at 90min respectively. There was no significant statistical association between BMI of the mother and hypoglycemia in neonates. However, the frequency of hypoglycemic episode in babies born at 37 weeks of gestation was higher than those born at 38 weeks and above with a significant P value of 0.0001. Neonates who were breastfed presented much less hypoglycemia than formula fed neonates with statistically significant P value of 0.0001.There was a higher incidence rate of hypoglycemia when feeding was initiated above 1 hour after delivery .

Conclusion: Delayed initiation of feeding, gestational age below 38 weeks and bottle fed infants were significantly associated with hypoglycemia. It is preferable to do a universal glycemic screening for all newborns to prevent transient neonatal hypoglycemia, which could have some deleterious consequences on the central nervous system and to start breastfeeding within 1 hour after delivery.

ID: 192

Maternal Interpretation of Weight Gain Patterns of Infants and the Psychological Impact of Growth Faltering in a Suburban Sri Lankan Population

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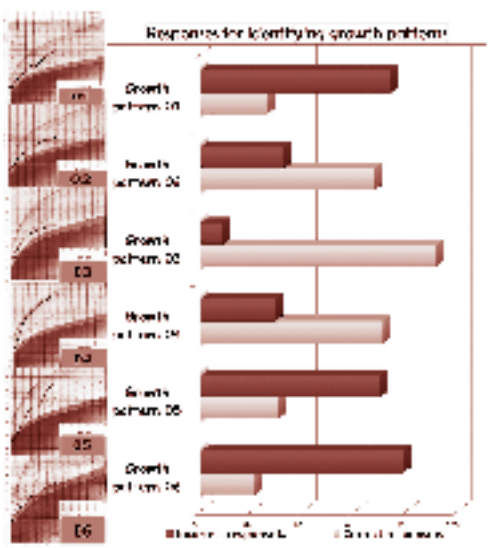
Introduction: Growth monitoring is a standard component of community child health services throughout the world. It consists of routine measurements of growth parameters such as weight and height and plotting these measurements on appropriate charts. Weight is the most often used parameter. In Sri Lanka, growth measurements are recorded in the "Child Health Development Record" (CHDR) which contains color coded charts for better comprehension. Accurate understanding and interpretation of growth patterns will enable early detection of problems and timely intervention. Incorrect interpretation can cause anxiety in the carer.

Purpose: The objective was to assess knowledge, understanding and interpretation of growth patterns in the CHDR and the psychological impact of perceived or real growth faltering among mothers of infants in a suburban area of Colombo.

Methods: A descriptive cross-sectional study was conducted at selected child welfare clinics in Piliyandala MOH area. Mothers of infants 6 to 12 months comprised the study population. An interviewer administered questionnaire with a series of growth charts were used to assess comprehension and interpretation of growth patterns. A focus group discussion was conducted with a group of mothers whose infants had perceived (by health care workers) or real growth faltering to determine the psychological impact.



Results: Out of the total number of mothers (n=189) interviewed, approximately half (52.4%) had satisfactory knowledge about the weight for age chart identifying color coding correctly. Two thirds (67.7%) of mothers identified growth pattern parallel to the median line as healthy growth (Pattern 2) and the pattern showing growth faltering as unacceptable (pattern 3). However, only 21.2% identified weight gain of a low birth weight baby parallel but at the -2SD line as an acceptable growth pattern (pattern 6). About 1/3 of the mothers misinterpreted rapid weight gain of a normal or low birth weight as healthy patterns (patterns 1,4,5). Mothers of infants with perceived or real growth faltering felt humiliated when they were confronted in the clinic and confessed to feeling helpless, guilty, frustrated and angry.

Conclusion: Although a majority of mothers had satisfactory knowledge about the color zones in the growth chart, their interpretation of growth patterns was not satisfactory. With the recent global trend in increasing childhood obesity, of particular concern is the misinterpretation that rapid weight gain in infancy is healthy. The psychological impact of perceived or real growth faltering on mothers was significant and might adversely impact growth monitoring programs in the community.

ORAL PRESENTATIONS: ENDOCRINOLOGY

ID: 271

"Not Every Neonatal Adrenal Crisis is Adrenal Hyperplasia"

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Introduction: Primary Adrenal Insufficiency (PAI) is rare in children, being Congenital Adrenal Hyperplasia (CAH) the most common cause. However, in about 1% of cases, the aetiology may be related to Adrenal Hypoplasia Congenita (AHC), due to defects in adrenocortical cells differentiation. The X-linked form results from mutations in the DAX-1/NR0B1 gene, on the short arm of X chromosome (Xp21).

Case Presentation: Two year old male admitted at 14 days of life with lethargy and vomiting, associated with hyponatremic dehydration (sodium 115 mEq/L) and hyperkalemia (potassium 8.5 mEq/L). Because of suspected adrenal crisis, hydrocortisone (HC) and fludrocortisone (FC) were initiated, with good clinical response. Additional investigation revealed normal 17-OHP levels, elevated ACTH (908 pg/mL) and renine and hypocortisolism. He had a brother with history of suspected adrenal crisis at 32 days of life, in the context of failure to thrive, hyponatremic dehydration, hyperkalemia and metabolic acidosis; the hormonal study showed normal 17-OHP, aldosterone and cortisol levels, with ACTH elevation (317 pg/mL). He was under HC and FC medication until he was two months old. He maintained paediatric follow-up, with emphasis on feeding difficulties with need of enteric nasogastric tube feeding until he was four months old; height evolution above the 95th percentile, and discrete but persistent elevation of the creatine phosphokinase (296-526 U/L), without apparent muscle weakness. At the age of five he was referred to Paediatric Endocrinologic Consultation because of noticeable hyperpigmented skin. Investigation demonstrated ACTH elevation (3755 pg/mL) with diminished cortisol (3.7 µg/dL), and normal 17-OHP (0,2 ng/mL), being the diagnosis of PAI confirmed. Genetic study of both brothers showed the presence of an hemizygote variant c.543del (p.Gly183Valfs*81) in the DAX1/NR0B1 gene, confirming the diagnosis of AHC.

Discussion: Diagnosis of AHC requires a high level of suspicion, given the clinical non-specificity and variability of age at presentation, manifestations and associated severity.Early recognition is essential for prompt hormonal replacement and genetic study contributes for genetic counselling, and also for better etiologic characterization. The authors aim to emphasize that genetic alterations in this location might extend to contiguous genes, as the DMD gene, responsible for Duchenne's Muscular Dystrophy, and so this condition should be thought of during these children's follow-up.

ID: 290

The First Growth Hormone Treatment in a Prader-Willi Syndrome Patient in Indonesia: A Case Report

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Introduction: Prader-Willi syndrome (PWS) is a genetic disorder caused by lack of paternally inherited gene expression in the 15q11-q13 chromosome region. Clinical manifestations of PWS include obesity, hyperphagia, intellectual disability, and hypogonadism. The benefits of growth hormone (GH) therapy in PWS patients include improved oxygenation, cardiovascular, motoric, and cognitive function; normal adult height; increased IGF-1 levels and HDL levels. Nevertheless, there were no PWS patients treated with GH in Indonesia up to this case, due to lack of funding and awareness.

Purpose: To raise awareness by reporting the benefits and constraints of GH treatment in a PWS patient in Indonesia.

Case Description: A 3 year old male came to Cipto Mangunkusumo National Hospital with shortness of breath. He was obese and his development was delayed. He was 106 cm tall (WHO z-score 0-1 SD) and weighed 46 kg (WHO z-score > 3SD). His BMI was 41,7 kg/m2 (CDC >P95). He had hypertension (>P95), dysmorphic face features, buried penis, cryptorchidism, and brachydactyly. His DNA methylation test confirmed the diagnosis of PWS. His polysomnographic examination showed mild obstructive sleep apnea with apnea hypopnea index (AHI) 5. His IGF-1 level was 77 ng/mL and his HDL level was 10 mg/dL. His IQ score was 61 with delayed mental age (2 year). He started GH therapy since March 31, 2018.

Results: Improvements that could be seen after the patient received GH therapy were increment of height from 106 cm to 115 cm (z-score 2-3SD), decrement of the BMI from 41.7 to 40, lowered blood pressure from >P95 to P50-90, increased IGF-1 level from 77 ng/mL to 192 ng/mL, increased HDL level from 10 mg/dL to 22 mg/dL, and improved AHI from 5 to 2.3. The IQ score has not been re-evaluated but there are progresses in his development, he speaks more sentences and can stand without support. The patient was burdened by the high cost of GH that was not covered by national health insurance. The estimated costs until the patient reaches his adult height is $894,722. To date, only a tenth of the cost has been gathered from local crowdfunding platform, therefore, the patient's likelihood of dropping out from the treatment is high.

Conclusion: Benefits are obtained from GH treatment in the PWS patient in Indonesia. Sustainable solutions are needed to increase awareness and to receive funds for GH treatment in PWS patients in Indonesia.

ID: 184

Primary Hypothyroidism in Children: Unusual Clinical Presentation

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Introduction: Primary Hypothyroidism in children is not uncommon and has an incidence of 1 in 4000. Presentation of acquired hypothyroidism is subtle as the symptom complex is generalized and non-specific. Pleural and pericardial effusion is a rare complication of severe hypothyroidism in children but can be present in 10-30% of adults. It may be a frequent manifestation in myxedema, but rarely associated with mild hypothyroidism, reported incidence of 3-6%. The pathophysiology of edema in hypothyroidism has been studied extensively. Myxedema refers to the deposition of hydrophilic mucopolysaccharides in the dermis, which results in swelling of the affected area. When the pericardial volume expands, it causes the pericardial pressure to increase, resulting in accumulation of pericardial fluid in the pericardial space.

Clinical Case: A seven-and-a-half-year-old girl, presented with cough for 1 month and generalized edema for 3 weeks She was previously well, with no history of cardiac or renal problems. She gained 7kg in 5 months and her weight plotted between the 75th-90th centile while the height was at 3rd centile. The swelling involved the eyes, legs, abdomen, and was worst at the end of the day. Also noted to have poor appetite, constipation and cold intolerance for the past 6-8 months. The child was otherwise doing well in school and reached her milestones appropriately. There is a positive family history of hypothyroidism—the child's mother has hypothyroidism that was diagnosed 10-15 years ago, and is on levothyroxine

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replacement. On examination, she appeared dull with sallow look and generalized edema. There were no signs of congestive cardiac failure and cardiovascular examination including blood pressure was normal. There was a small palpable goiter and rest of the examination was normal. In view of the symptoms of prolonged cough and generalized edema, a chest-radiograph was done. It showed a globular cardiac silhouette raising suspicion of pericardial effusion and echocardiogram revealed pericardial effusion with echogenic pericardium, and mild bilateral pleural effusion. Other chemical biochemistry showed acute renal impairment, mild transaminitis, elevated total and LDL cholesterol and mild anemia. Autoimmune screen was normal. Thyroid functions showed a markedly raised thyroid stimulating hormone (TSH) with low FT4 and raised thyroid peroxidase antibody which clinched the diagnosis of autoimmune primary hypothyroidism. Thyroid ultrasound showed a heterogeneous gland with slightly increased vascularity. Thyroxine was started as a low dose and increased slowly to achieve biochemical and clinical euthyroid state. The pericardial effusion resolved in 3 months and metabolic derangements normalized with thyroxine replacement.

Conclusion: In patients presenting with chronic non-specific clinical symptoms with generalized edema, hypothyroidism must be considered in the differential diagnosis. Also, once diagnosis is established it is good to look for complications like pericardial and pleural effusion especially in cases of severe hypothyroidism. Conversely in patients presenting with unexplained pericardial or pleural effusion, hypothyroidism must be considered in the diagnosis. Early recognition and treatment with thyroxine could eliminate the need for unnecessary diagnostic procedures and invasive measures and reduce the risk of progression to cardiac tamponade.

ID: 186

Biochemical Effects of High Dose Vitamin D Treatment in Preterm Infants

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Aims: Our neonatal unit currently supplements all neonates with vitamin D levels of < 70mmol/l with 1500 IU cholecalciferol for 6 weeks. We aimed to determine the incidence of Vitamin D deficiency in extremely low birthweight infants (ELBW) and the influence of ethnicity. Vitamin D supplementation of ELBW infants is debated. We investigated whether 1500 IU of cholecalciferol was safe and effective and the correlation of Vitamin D levels with bone health markers namely corrected calcium, phosphate and alkaline phosphatase levels.

Results: 57 babies born between August 2015 and May 2017 were treated as per local protocol. The median gestational age was 27.0 weeks and median birth weight 855 grams. 30 babies (52%) were Vitamin D deficient (Vitamin D level <50 mmol/L). There was no statistically significant difference in the incidence between Caucasian and non-Caucasian infants. The correlation of ALP and Vitamin D levels before treatment was 0.463, (p=0.001). The correlation between the day of life of rise of ALP to >400 and the Vitamin D level was -0.282 (p=0.049). There was no statistically significant difference between the corrected calcium and phosphate levels and Vitamin D levels before and after treatment. The mean Vitamin D before supplementation was 48 and increase to 78.5 (p=0.001) after supplementation. The mean ALP before and after supplementation was 601 and 462 respectively (p=0.0003). There were no babies who developed Hypervitaminosis D. The proportion of babies that remained deficient after treatment was 37%.

Conclusion: The incidence of Vitamin D deficiency is high in ELBW infants and measurement of Vitamin D levels in this cohort is essential. While the current ESPHAN recommendations may be sufficient in Vitamin D replete infants higher doses are required in infants who are deficient. Factors other than cholecalciferol may be more significant in affecting bone health in the early days after preterm delivery. We hypothesise that treatment with 1500IU units of cholecalciferol in ELBW infants is safe. We have shown that Vitamin D treatment improves alkaline phosphatase levels and may promote preterm infant bone health in the longer term.

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Presentations

ID: 280

Parental Control and other Social Factors on Adolescent Internet Addiction

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Introduction: Internet has become part of our daily routine and of our reality, especially in adolescence. Worries have risen regarding its excessive use and its effects on adolescent health. The role of parents regarding control of their children's internet use has not been widely reported. The aim of this study was to assess internet addiction prevalence and the relationship with parental control and other social factors, such as family structure and school success.

Methodology: A cross-sectional community study was conducted. Local Portuguese elementary and secondary-school students, from 7th to 12th grade, were asked to answer a questionnaire that evaluated social factors and internet addiction (Youth's Internet Addiction Test). A descriptive and bivariate analysis for internet addiction was performed. STATA v.14 was used for statistical calculations, with a significant p value <0.05.

Results: This study included 1916 participants with an average age of 15±2 years and a slight female predominance (53.3%). About 58% of adolescents had some kind of parental control over the internet use. Prevalence of internet addiction was 16.5% in our sample. There a male-student predominance. Those who had failed at least one school-year were twice as likely to be addicted (OR 1.93, p<0.05). Students who had online activities at bedtime were also at greater risk of being internet addicted (OR 1.4, p<0,05). Adolescents with a single-parent family structure were more prone to be addicted (p<0.05). Parental control over internet use (OR 0.73; p<0.05), over total amount of time spent online (OR 0.69,

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p<0.05) and over visited content (OR 0.59; p<0.001) was associated with lower probability of internet addiction. Conversely, using internet during family mealtime was greatly associated with addiction (OR 2.83; p <0.001).

Conclusion: Internet addiction in adolescents was a significant problem in our study, with a prevalence comparable to other reports. Traits such as grade retention, online activities at bed time, single-parent family structure and internet use during mealtime were greatly associated with addiction. On the other hand, parental control over internet use was related to lesser probability of addiction. As such, this study helps to enlighten the importance of parental strategies and behavioural changes on managing with internet addiction.

ID: 254

Internet Addiction and Health Status Among Adolescents – A Cross-Sectional Study

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Introduction: Internet has become part of our daily routine and reality, with a growing interest amidst adolescents. Concerns have risen regarding its excessive use and long-term effects on their health. Few studies have addressed this subject in regards to overweight, lack of sleep and health-related problems, especially in Europe. Therefore, we aimed to study the relationship between internet addiction and health status among Portuguese adolescents.

Methodology: A cross-sectional community study was conducted by applying a questionnaire that assessed psychosocial factors, health status, internet addiction (Youth's Internet Addiction Test) and wellbeing of adolescents (WHO-5 Wellbeing Index). Local Portuguese elementary and secondary-school students, from 7th to 12th grade, were asked to participate. A descriptive and bivariate analysis for Internet Addiction was performed, and a logistic regression model was used. STATA v.14 was used for statistical calculations, with a significant p value <0.05.

Results: This study included 1916 participants with an average age of 15±2 years and a slight female predominance (53.3%). Although most adolescents said they had previously talked about internet addiction and thought it was an important health-related problem, as much as 16.5% were considered internet dependent. Health problems were reported by 24% of participants and a poorer status of wellbeing was seen in little over 22%. At bedtime, almost half (45%) admitted to have online activities, with about 41% not sleeping an adequate amount of time. Girls were found to be 28% less addicted to internet (OR 0.72, p< 0.05). Those who had online activities at bedtime (OR 1.40, p< 0.05) and who lacked sleep (OR 1.55, p<0.05) were more likely to be addicted. Similarly, a poorer wellbeing status was associated to addiction (OR 1.44, p<0.05). Chronic health problems related to weight, sight, atopy, anxiety or attention-deficit and hyperactivity disorder were, however, not found to be significantly related to internet addiction.

Conclusion: Internet addiction was a significant problem in our study sample. Traits such as poorer wellbeing and lack of sleep year were greatly associated with addiction, concurring with previous studies. On the contrary, though the literature seems to indicate that excessive internet use has a negative effect in adolescents' chronic health problems, this was not clearly shown in our study and warrants further investigation. Since internet addiction has important implications on adolescent's health status, clinicians should routinely screen for it within their practice.

ID: 262

Adolescent Obesity – A Health Problem Beyond Adiposity

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Introduction: The increasing prevalence of paediatric obesity has raised concerns regarding an escalating disease burden in multiple health domains. Adolescents with obesity have an increased risk of psychosocial morbidity and are particularly vulnerable to the effects of mental health disorders (MHD) across their life course. The presence of MHD can disrupt normative development in adolescence and influence the course of obesity in this at-risk population.

Purpose: To determine the prevalence of mental health disorders among overweight and obese adolescents, and to evaluate its association with the clinical course of obesity.

Methods: Retrospective cohort study (2012-2018) of overweight and obese adolescents, aged 12-18 years old, referred to a multidisciplinary adolescent clinic, who had attended at least three medical visits. Weight status was categorized using age- and sex-specific reference values from the WHO z-score charts. MHD were assessed during dedicated clinical visits, conducted by either an adolescent psychologist or a paediatric psychiatrist. Statistical analysis was conducted with SPSS Statistics 19.0.

Results: 311 adolescents (48% male; age 15.1±1.63 years old; BMI 32.2±5.85 kg/m2; 81% obese) were included. MHD were identified in 39% of overweight/obese adolescents, with depression and anxiety accounting for over two thirds of the diagnoses (48.3% and 20.8%, respectively). The presence of MHD was associated with higher BMI levels (33.6±6.62 vs 31.3±5.15;p=.015), irrespective of gender or age. Adolescents with obesity (43%) were more than twice as likely as those with overweight (25%) to have MHD (OR 2.17, 95%CI:1.15-4.11;p=.017). A repeated measures ANOVA revealed that mean BMI increased between first and last visits (F(1.0, 112.0)=14.585;p<.001), and MHD were independently and positively associated with a higher increase in BMI (33.3±5.51 to 34.1±6.77 vs 31.1±4.81 to 31.4±5.80;p=.016). Those with MHD were 1.7 times more likely than those without MHD to significantly increase their adiposity over time (OR 1.67, 95%CI:1.03-2.70;p=.037).

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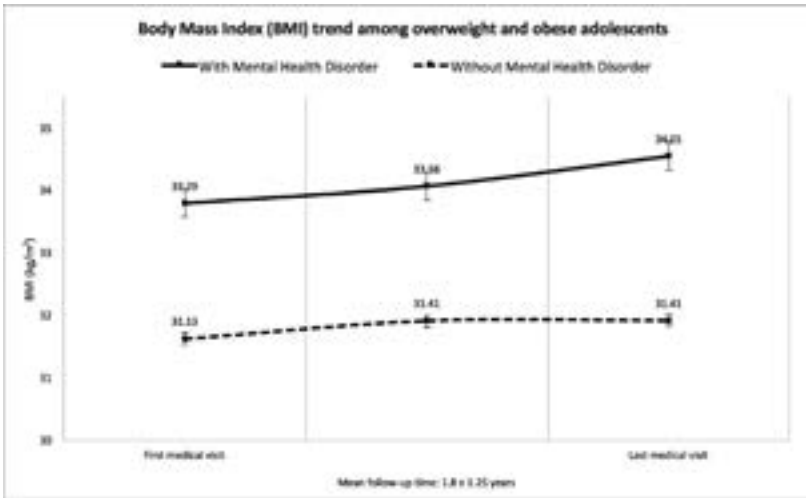

Conclusions: Almost 40% of overweight and obese adolescents had MHD as a comorbidity. From these, half were diagnosed with depression, a MHD known to have a bidirectional relationship with obesity. Adolescents with MHD had higher levels of excess weight and worse clinical outcomes, with less ability to maintain or reduce weight. These findings suggest that the presence of MHD may be an important indicator of a more persistent and treatment-refractory course of obesity. Adolescents with obesity are at a particular high risk and should be regularly screened for mental health problems. Future research focusing on the psychosocial consequences of excess weight should provide further insights on targets for effective interventions to reduce adolescence obesity and its disease burden.

ID: 240

Suicide Prevention in Luxembourg: Using the HBSC Symptom Checklist as an Alternative Screening Tool for Adolescents at Risk

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Introduction: Suicide is one of the leading causes of death of young people and as such, screening for suicidal ideation is a major public health concern. However, there is fear that exposure to suicide-related content would encourage suicide attempt. This false idea is a great barrier to effectively screen. Hence, the need for tools without suicide content.

Purpose: The goal of this study is to present a short tool that could be helpful for suicide screening and prevention.

Materials and Methods: This study is based on the 2014 HBSC Luxembourg survey. A total of 5595 students aged from 12 to 18 years old in secondary school responded to a questionnaire translated to both French and German. Among others, it included the HBSC Symptom Checklist, a scale developed to measure eight health complaints (headache, abdominal pain, backache, feeling low, irritability, feeling nervous, sleeping difficulties and dizziness), as well as 4 questions asked in a logical sequence concerning sadness, suicide ideation, suicide planning and suicide attempt.

Results: Multivariate Logistic Regression analyses with 24 potential indicators showed the number of health complaints as the most predictive indicator for suicide attempt (OR=1.248; C.I.: 1.175-1.325). Following, a significant ROC curve (area under the curve of 0.76; sensitivity=0.68 and specificity=0.73) and Youden Index (0.41) indicates the optimum cut-off at three complaints, with a predictive value of 17%. An alternative cut off point at four (sensitivity=0.57 and specificity=0.82; Youden Index of 0.39) has a predictive value of 21%.

Conclusion: The HBSC Symptom Checklist seems to be a good predictor as each additional health complaint increases the risk of suicide attempt by 25%. In addition, it could be an alternative to traditional suicide screening measures, as its sensitivity, specificity and predictive values are similar to measures more commonly used, such as the Columbia Suicide Screen or the Beck Depression Inventory. Further work should be invested to validate the HBSC Symptom Checklist as a screening tool for suicide prevention.

ID: 241

Gender Differences in Risk Factors for Suicidal Behaviours in Adolescents

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Introduction: As the second leading cause of death among young people suicide is a severe public health problem. Previous studies have indicated that risk factors for suicidal behaviours differ for males and females, although it remains uncertain whether gender predicts suicidal behaviors. The 2014 HBSC study in Luxembourg has gathered data on the suicidal ideation sequence in adolescents and can contribute to these issues.

Purpose: The objective of this study was to examine gender differences within the risk factors for suicidal behaviours within the adolescent population of Luxembourg.

Materials and Methods: Data on suicidal ideation among adolescents was collected through written survey. Data from secondary school students aged 12 to 18 was used (N=5595). Bivariate logistic regressions were conducted in order to identify risk factors for the dependent variables of “sadness”, “considering suicide”, “planning suicide” and “suicide attempt” in the last twelve months. Subsequently, multivariate logistic regressions were performed split by gender. 24 independent variables were included in the models.

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Results: The three significant variables that added most to the models for "sadness" and "suicide attempt" are named. For boys, the odds for sadness were impacted by the number of health complaints (OR: 1.4 for each additional health complaint; CI: 1.4-1.6), life satisfaction (OR: 1.2 for each additional unit; CI: 1.2-1.3) and body image (OR: 1.6 for too thin; CI: 1.1-2.3; OR: 1.7 for too fat; CI: 1.3-2.3). For girls, the variables were the number of health complaints (OR: 1.4; CI: 1.3-1.4), life satisfaction (OR: 1.3; CI: 1.2-1.4) and sexual abuse (OR: 2.5; CI: 2.0-3.1). Considering suicide attempts, for boys the odds were impacted by the physical fighting (OR: 2.9 for 4 fights or more; CI: 1.5-5.5), life satisfaction (OR: 1.2; CI: 1.3-2.1) and substance use (OR: 1.7; CI: 1.3-2.1). For girls, the number of health complaints (OR: 1.3, CI: 1.2-1.4), life satisfaction (OR: 1.3; CI: 1.2-1.4) and type of school (OR: 3.7 for secondary technique; CI: 2.1-5.0) impacted the odds.

Conclusion: This study has indicated that differences in risk factors between the genders increase as the severity of suicidal behavior increases. This highlights the need for distinct strategies for the prevention of suicide behaviours that are suitable for the different genders, and their respective risk factors.

ID: 276

Anxiety and Academic Performance in Adolescents

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Introduction: Anxiety arises in anticipation of a future threat. Fear is a response to an imminent threat. They are usually adaptive responses. However, when they interfere with the normal functioning of the individual, they become pathological and are called Anxiety Disorders. Adolescence is a risk age period for the development of these disorders, which can lead to poor developmental and academic outcomes.

Purpose: Identify and characterize a population of adolescents with Anxiety Disorder at the Adolescent Medicine Outpatient Clinic of a Tertiary Hospital and its correlation with academic performance.

Methods: A retrospective study was conducted through the analysis of the clinical processes of adolescents with Anxiety Disorder followed at the Adolescent Medicine Clinic between 2016 and 2017.

Results: A total of 128 patients were identified, most of whom (n= 95, 74%) were female, with an age comprised between 10 and 21 years. Eighty of those patients (62.5%) were referred from the Emergency Department and 96 (75%) had a first time consultation during school time. The complaints that most frequently motivated a referral were thoracalgia, dyspnea or hyperventilation, and syncope or lipothymia. In 69 patients (54%), diagnostic exams were requested to rule out an organic disease. The most frequently diagnosed Anxiety Disorder subtypes were Social Anxiety (33), Panic (32) and Generalized Anxiety (17). Fifty-eight patients (44%), had a decreased school performance and 27 (21%) had a history of grade retention; 91 (71%) were on regular curriculum; around 10% reported having been bullied. The incidence of family dysfunction was 40.6%. After having started pharmacological therapy and/or psychotherapy, 29% of patients improved their grades at school. From those who did not improve their grades, 42 (46%) dropped out from the Clinic.

Conclusion: Poor school results are prevalent among adolescents with anxiety. Every adolescent attending a clinical appointment should undergo a routine structured biopsychosocial assessment for a timely identification of anxiety and early intervention. Training of health professionals in the provision of comprehensive healthcare to adolescents will reduce health costs in the long run.

ID: 148

Adolescent Immigrants in Italy:Internalising Problems, Bullying Behaviours and Socioeconomic Status.

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Introduction: Immigrant adolescents' view of their own wellbeing is an important indicator of inclusion. Immigrant status has often been postulated as a risk factor for mental health problems among adolescents, but few systematic patterns have been reported in previous studies, especially those that took into account differences between first- and second-generation immigrants.

Method: Using the Italian 2013/14 Health Behaviour in School-aged Children sample, we investigated perceived well-being in a representative sample of 47 799 students aged 11, 13, and 15 years recruited throughout all Italian regions. Wellbeing was measured as internalising problems (health complaints and life satisfaction) and externalising behaviours (bullying behaviours and physical fights).

Results: The SES distribution and ethnic background of first- and second-generation immigrants revealed two major patterns: a Western countries pattern and a different pattern, which encompassed people from Eastern European and non-Western/non-European countries. Adolescent immigrants from the Eastern European and non-Western/non-European countries pattern had a higher occurrence of health complaints and more frequently reported low life satisfaction when compared to their counterparts from the host population, and these differences became more marked among second-generation immigrants.

Conclusion: The risk of reporting bullying behaviours and physical fights was evident in first-generation immigrants and decreased among second-generation immigrants, independent of ethnic background. Welfare provisions directed to families and children, as well as educational policies, may play a role in the adolescent well-being and mental health, particularly in the immigrant population.

ORAL PRESENTATIONS: RESPIRATORY

ID: 238

Prevalence of Self-report Chronic Pain among Adolescents in 42 Countries and Regions

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Background: Reports of chronic pain prevalence among adolescents vary greatly across existing studies. To date, the majority of studies focused on reporting site-specific pain; however, existing studies suggest that multi-site chronic pain is being more prevalent than single- site pain. This study presents country-level effects in the prevalence of chronic single-site and multi-site pain among adolescents using results which have been published by Gobina et al. in European Journal of Pain (2018; https://doi.org/10.1002/ejp.1306).

Methods: Data (n = 214,283) from the 2013/2014 Health Behaviour in School-aged Children (HBSC) study were used including nationally representative samples of 11-, 13- and 15-year-olds from general schools in 42 participating countries. The self-reported weekly pain during the previous six months was studied. Localized “”single-site” pain (pain reported at only one site – either head, or stomach, or backache, by excluding other sites) and “multi-site pain” (pain reported in at least two sites) were analysed separately. Multilevel logistic regression analyses for studying country-level effects and log-linear analysis for studying associations between the studied types of pain were used.

Results: Overall, significant cross-country variations in the chronic pain prevalence and chronic pain patterns among adolescents exist. In general, the prevalence of localized specific pain types reported in this study was 11.3% for headache, 7.7% for backache and 4.6% for stomach-ache. The prevalence of multi-site pain was more common varying from 13.2% in Armenia to 33.8% in Israel. The log-linear analysis showed that the two-way and three-way interactions among studied pain were all significant ($p<0.001$). The strongest effect was found for the co-occurrence of headache and stomach-ache, but the weakest for the co-occurrence of all three types of pain.

Conclusions: Although the international heterogeneity of chronic pain prevalence across countries exist, internationally comparable data show that experience of chronic pain among adolescents is common. Chronic pain in adolescents should be managed using a multidisciplinary approach by taking into account the multidimensionality of chronic pain, as adolescents with chronic pain are not a homogeneous group.

ORAL PRESENTATIONS: RESPIRATORY

Presentations

ID: 136

Surveillance of Inhaled Steroids (IS) in children : the REDS (REspiratory Drugs Survey) Study

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Introduction: From the Italian prescription data emerges an increase of the consumption of IS in the age group 0 -14 yrs and an increase in ADRs related to them, making it evident of a non-rational use of them that are not always based on scientific evidence. Despite the prevalence of Asthma (9.5 % - 10.5% in 6 -11 yrs), it has been particularly noted that IS are used inappropriately in children with an “over prescription” for conditions that do not require their use, specially for colds, coughs and sore throats. IS have also a modest effectiveness in preventing both recurrent wheezing viral and bronchiolitis(many times IS are used improperly by pediatricians in these conditions too) In the Enbe Study(Effectiveness of Beclomethasone versus placebo in the treatment of preventing viral wheezing in the preschool age group) Beclomethasone reduced the risk of viral wheezing by 4% (from 11% to 7%) but the difference was not statistically significant.

Purpose: From these considerations, there is a necessity for a Phase IV research project to be conducted by Family Pediatricians (FPs) that can foresee both training courses for FPs and informational for families regarding the correct use of IS and any iatrogenic illness caused by their improper use and a survey on prescriptive appropriateness and safety in children aimed at evaluating the risk-benefit balance on usage. The aim of the study is monitoring the use of IS with careful analysis of the risk/benefit factor of the therapy, through the accuracy of diagnosis, the therapeutic appropriateness and the safe use of medication.

Materials and Methods: In this epidemiological / observational (case-control) and active surveillance project, the prescribing data for children (0 - 14 yrs)were collected and processed by Family Pediatricians (FPs). There have been three time steps:1)Elaboration of the prescriptive data (year 2015 -retrospective); 2)Training / information events on FPs and families on the correct use of IS (year 2016); 3)Elaboration of the prescriptive data (of the same FPs)(year 2017-prospective) and comparison with those of 2015.

Results: After the training phase:the prevalence decreased from 23.88% to 16.03%;the percentage of the appropriate prescriptions increased from 29.96% to 56.69%;the percentage of the inappropriate prescriptions decreased from 70.04% to 43.94%;the prevalence of inappropriate prescriptions in the 0-4 yrs decreased from 72.64% to 43.80%,in the 5-10 yrs from 65.54% to 39.73%,and in the 11-14 yrs from 72.10% to 37.20%;the percentage of inappropriate expenditure decreased from 69% to 42.66%;the percentages of inappropriate prescriptions decreased for beclomethasone from 72.03% to 41.09%, for budesonide from 69.89% to 48%, for fluticasone from 53.84% to 33% and for flunisolide from 73.33% to 60.68% ;the total number of pieces prescribed decreased from 2.870 to 2.023.

Conclusions: We have highlighted that only through training course for FPs and correct information to families can we have a significant improvement in the use of IS.For this reason we need an effort regarding the training on these drugs both by pediatricians and above all by parents who frequently administer medicines to children for infections of the respiratory tract, without consulting their pediatricians.

ORAL PRESENTATIONS: RESPIRATORY

ID: 119

Comparing Efficacy of a Novel Foot Operated Resuscitator Versus Bag and Mask Ventilation in a Manikin.

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Title: Foot operated NeoBreathe reduced leak as compared to Bag and Mask while maintaining tidal volume in appropriate range during neonatal resuscitation.

Introduction: Birth asphyxia, defined as the failure to establish breathing at birth, accounts for an estimated 813,000 deaths each year and is the third largest cause of neonatal mortality. Delivery at a facility where newborn resuscitation is available lends itself to being one of the most effective life-saving public health intervention. However, effective newborn resuscitation requires skill that is unavailable at most birth facilities in low resource countries. One of the key challenges faced by care providers in effective resuscitation is the formation of an effective face mask seal, lack of which leads to high and variable leakage, causing wide variability of tidal volumes even in the hands of experts. NeoBreathe Foot Operated Resuscitator addresses this issue by freeing one hand of the operator from the task of bag-compression, as it employs the operator's foot for powering resuscitation.

Purpose: Comparing Efficacy of a Novel Foot Operated Resuscitator versus Bag and Mask Ventilation in a manikin.

Method: A controlled trial was conducted at a level III neonatal intensive care unit (NICU) of a tertiary care hospital, among 117 participants, using an infant manikin Baby Anne. Mass flow and pressure sensors were fitted to measure tidal volume (Vt) delivered and volume propelled. Pressure and volume data was recorded in real time. Participants were given study set-up orientation, device usage training and practice time before data capture. Each participant was asked to deliver 60 breaths/minute, using each device while targeting adequate chest-rise corresponding to a targeted 15-21 ml Vt. Vt, Peak Inspiratory Pressure (PIP), Leak Percentage (%), inspiratory time (Ti, msec) and other parameters were recorded using a Notebook PC (Dell®, Windows® 10) on a specially developed application (LabViewTM 2014 platform National Instruments®, USA). Percentage breaths that achieved target range Vt, other key ventilator parameters and their variability were assessed and compared between the two devices.

Results: Using Bag-Mask-Ventilation (BMV), participants delivered a Mean(SD) Vt of 17.52(5.22) ml, achieving target range Vt in 46.99% % of all breaths, with a Mean(SD) face-mask leak % of 32.51% (22.25). Using NeoBreathe, participants delivered a Mean(SD) Vt of 18.31(3.90), achieving target range Vt in 54.37% of all breaths and a Mean(SD) face mask leak% of 18.89% (14.45). Variability of Vt, PIP and Leak% was significantly reduced with NeoBreathe. (Table 1)

Table 1: Primary Performance Parameters of BMV and NeoBreathe

	No Experience		Some Experience		**Overall**	
	BM N= 2453	NB N= 2361	BM N= 4261	NB N= 4167	**BM** N= 6714	**NB** N= 6528
Tidal Volume (ml)	16.82(5.23)	18.04(3.78)	17.92(5.18)	18.46(3.96)	**17.52(5.22)**	**18.31(3.90)**
Mean Diff. (95% CI of diff.)	-1.22(-1.48, -0.96)		-0.53(-0.73, -0.33)		**-0.78(-0.94, -0.63)**	
Peak Inspiratory Pressure (cmH_2O)	19.86(5.98)	19.99(4.24)	22.05(6.38)	20.16(3.93)	**21.25(6.33)**	**20.10(4.04)**
Mean Diff. (95% CI of diff.)	-0.13(-0.43, -0.16)		1.90(1.67, 2.12)		**-0.92(-0.97, -1.33)**	
Leak%	31.82(23.19)	16.76(14.83)	32.91(21.69)	20.09(14.09)	**32.51(22.25)**	**18.89(14.45)**
Mean Diff. (95% CI of diff.)	15.06(13.96,16.16)		12.82(12.04, 13.60)		**13.63(12.99, 14.26)**	
Leak (ml)	10.25(10.58)	4.18(5.51)	11.66(11.61)	5.28(4.69)	**11.14(11.26)**	**4.88(4.66)**
Mean Diff. (95% CI of diff.)	6.07(5.62, 6.53)		6.38(6.00, 6.75)		**6.26(5.97, 6.55)**	
Inspiratory Time (milliseconds)	346.04(142.72)	378.11(144.20)	357.37(134.94)	386.42(141.14)	**353.23(137.93)**	**383.42(142.30)**
Mean Diff. (95% CI of diff.)	-32.07(-40.18, -23.96)		-29.05(-34.95, -23.16)		**-30.19(-34.96, -25.41)**	
Pressure drop through upper airway (cmH_2O)	4.28(2.69)	2.80(1.49)	5.56(4.64)	3.22(1.97)	**5.09(4.09)**	**3.07(1.82)**
Mean Diff. (95% CI of diff.)	1.47(1.35, 1.60)		2.34(2.19,2.49)		**2.02(1.92, 2.13)**	
Propelled Volume (ml)	27.02(10.49)	22.11(5.38)	29.55(11.85)	23.67(6.12)	**28.63(11.44)**	**23.11(5.91)**
Mean Diff. (95% CI of diff.)	4.90(4.43, 5.37)		5.88(5.48, 6.28)		**5.52(5.21, 5.83)**	

Conclusion: NeoBreathe could offer a novel alternative to a bag-mask resuscitator, especially in skill-constrained settings.

ID: 141

Effect of a Family Empowerment Program on Coping with Stress, Problem Solving in Parents, and Quality of Life in Children with Cystic Fibrosis: Randomized Controlled Trial

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Background and Aims: Parents of children with cystic fibrosis (CF) experience high levels of stress and problems. Family empowerment interventions provide important support for many patients with CF and their families. The present study aimed to assess the effect of a family empowerment program-based nursing intervention on parents coping with stress and problem solving, and quality of life children with CF.

Methods: In this randomized clinical trial, 44 parents of children with CF were randomly assigned into experimental and control groups. Data were collected through coping with stress, problem-solving skills, and quality of life scales from both groups, before, immediately before, and one month after the intervention. Family empowerment interventions were held for ten weeks. The data were analyzed using SPSS, the Wilcoxon signed-rank test, and the Mann-Whitney U test.

ORAL PRESENTATIONS: RESPIRATORY

Results: There was a significant difference between the experimental and control groups after the intervention in the submissive approach dimension of the coping with stress scale in parents (p<.05). The total score level of problem-solving skills of preintervention and postintervention parents of the experimental group was statistically significant (p<.001). There was a significant difference between the mean children's quality of life score in the experimental and control groups after the intervention, and the mean scores of emotional, social, treatment load, and respiratory subscale (p<.01), and mean physical subscale points (p < .05).

Conclusions: Family empowerment interventions applied to the parents of children with CF increase the quality of life of children and their parents' ability to solve problems and cope with stress.

ID: 279

Mycoplasma Pneumoniae Infection: Polymerase Chain Reaction Detectionin Symptomatic Children and Adolescents

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Introduction: Mycoplasma pneumoniae is a commonly identified cause of community-acquired pneumonia in children and adolescents, presenting with several patterns. Distinction from other respiratory pathogens may be difficult.

Purpose: Analyze epidemiological and clinical characteristics of pediatric patients diagnosed with M.pneumoniae infection.

Materials and Methods: Retrospective cross-sectional study, with medical chart review of the patients younger than 18 years old with positive results for M.pneumoniae by polymerase chain reaction (PCR) after observation in hospital's emergency department and/or inpatient care unit, from January 2010 to June 2018. Statistical analysis was performed with IBM SPSS Statistics v.24®.

Results: During the study period, 74 patients were diagnosed with M.pneumoniae infection through a positive identification by PCR in respiratory specimens; 40.6% were younger than 6 years, with a median age of 7 years (IQR 4-10). Seventeen patients (23%) had history of virus-induced wheezing or asthma. All patients presented respiratory symptoms during a median of 7 days (IQR 4-8.75): cough was universal, dyspnea in 18.9% and thoracalgia in 9.5%. Sixty-six cases (89.2%) had fever for a median of 4 days (IQR 3-7). Extra-respiratory symptoms such as nausea/vomiting (45.9%), abdominal pain (13.5%), asthenia (10.8%) and odynophagia (9.5%) were verified. Nineteen patients exhibited hypoxemia (25.7%). In the cases that analytical evaluation was performed (n=62), median leukocytes were 9,770/uL (IQR 6,893–13,510/ul) and C-reactive protein was ≥5 mg/dl in 20 cases (32.3%). Chest X-ray showed positive radiological findings in 98.6%: 75.7% presented hilar patchy reticular opacities, 71.6% consolidation, 6.8% atelectasis and 10.8% pleural effusions. One adolescent required noninvasive ventilation; two cases developed M. pneumoniae-induced rash and mucositis. Forty-four (59.5%) patients were hospitalized, being the presence of dyspnea (p 0.026), hypoxemia (p<0.00) and respiratory stress (p 0.042) associated with admission. Two cases of co-infection were detected: one patient with Parainfluenza-4 and other with H.influenzae. Almost all patients were referred to outpatient clinic (89.2%). During follow-up one child developed post-infectious bronchiolitis obliterans and another one, bronchial thickening. We verified epidemics of M.pneumoniae infection in intervals of 3 to 4 years, with 80% of the cases occurring in the years 2011, 2014 and 2018.

Conclusion: M.pneumoniae infection should be considered in pre-school children and infants, especially when there is an epidemic peak; extrapulmonary manifestations may raise the suspicion. Chest x-rays do not present pathognomonic features. The clinic should guide the decision to test for M.pneumoniae by PCR, and caution should be taken when interpreting the results because asymptomatic carriers could also have positive results.

ID: 247

Cow's Milk Protein Allergy in The Newborn: Challenges Concerning Diagnosis and Management in Clinical Practice

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Introduction: Cow's milk protein allergy (CMPA) is the leading cause of allergy in the first year of life. The diagnosis of CMPA in the neonatal period requires a high degree of clinical suspicion and is generally based on clinical response to allergen avoidance; serum specific immunoglobulin E (sIgE) levels for cow's milk protein (CMP) are often negative. An adequate diagnosis is crucial for timely and criterious implementation of elimination diet.

Purpose: The authors proposed to investigate cases of suspected CMPA in the first month of life, in a 5.5-year period.

Materials and Methods: Retrospective descriptive analysis of demographic, clinical and laboratory data of the newborns (NB) in which CMPA was suspected, between January 2013 and June 2018, in a level-III Portuguese hospital.

Results: This study included 33 NB, of which 17 (51.5%) were males. The onset of symptoms occurred on average at the 17th day of life and coincided with the introduction of standard infant formula in 58% of the cases. Gastrointestinal manifestations were the most frequent (24/33), mostly bloody stools (18/24); there was cutaneous involvement in 12/33, mainly urticaria (9/12). Assay of sIgE for CMP was positive in 5/33 (minimum 0.65 kU/L, maximum 22 kU/L). Of these, 4 presented with urticaria and 1 with vomiting. In 27/33 CMP eviction was accomplished for a median time period of 152 days (25th-75th percentiles = 61-228), with improvement. Following avoidance, 21/27 have already reintroduced CMP in the diet after performing oral food challenge, with negative results; no reactions were reported. After a case-by-case review of clinical findings and test results, CMPA diagnosis was considered positive in 14/33, negative in 11/33 and unclear in 8/33.

Conclusion: In our study, non-IgE manifestations were the most frequent; however, we found a relevant number of IgE manifestations with corresponding documented sensitization. In this series, oral provocation tests were performed mainly for tolerance assessment, which reflects the most common practice of using elimination diet as a diagnostic tool. Taking into account the number of suspected cases in our study, there was a high number of cases in which the suspicion was not confirmed. The diagnosis of CMPA in the neonatal period is challenging; a rigorous and timely approach is needed not only to institute early eviction but also to prevent unnecessary (and sometimes prolonged) food restrictions.

ORAL PRESENTATIONS: RESPIRATORY

ID: 196

Increased Total Serum Immunoglobulin E in Children Developing Mycoplasma Pneumoniae-related Extra-pulmonary Diseases.

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Introduction: Mycoplasma pneumoniae has been recognized to be involved in several extra-pulmonary diseases in children, in addition to respiratory infections. Most clinical descriptions of M. pneumoniae-related extra-pulmonary diseases (MpEPDs) are related to skin (urticarial rashes, multiforme erythema, Stevens-Johnson syndrome, erythema nodosum) and joints (reactive arthritis/arthralgia), but those can involve the nervous, heart, gastro-intestinal, hematological systems, as well. Unfortunately, the underlying immunologic mechanisms are still unknown.

Objectives: Assessing the potential association between atopy and MpEPDs, as we recently observed a significant elevation of serum IgE in a small group of pediatric patients.

Methods: We carried out a cross-sectional observational study, including 162 hospitalized children admitted to the hospital (because of respiratory infections or different types of extra-pulmonary diseases with probable immune-mediated pathogenesis) and tested for M. pneumoniae by serology tests.

Results: We identified 3 groups of children: I) with respiratory diseases unrelated to M. pneunoniae (n=61); II) with respiratory diseases due M. pneumoniae (n=56); III) with extra-pulmonary diseases related to M. pneumoniae infection (n=18). MpEDs included in the group III patients were: vasculitic urticaria (n=4), erythema multiforme (n=4), myopericarditis (n=2), myositis (n=2) nephritis (n=1), reactive arthritis (n=1), meningoencephalitis (n=1). There was no significant difference in total serum IgE between children with M. pneumoniae respiratory infections and those with respiratory infections unrelated to M. pneumoniae (253.52 ±56.8 UI/ml vs. 164.37±48.3 UI/ml, respectively). On the contrary, patients developing MpEPDs showed significantly higher levels of IgE than both previous groups (402.15 ±94.7 UI/ml; $p<0.001$ vs. group I; $p<0.01$ vs. group II). Such an interesting finding was confirmed also by normalizing the IgE levels for the normal values, according to age.

Conclusions: Hospitalized children diagnosed with different MpEPDs seem to have significantly increased serum IgE compared to children developing respiratory illnesses only. We might speculate that atopy might be a biological marker of predisposition to develop extra-pulmonary complications during M. pneumoniae infection, also according to some recent observations, that seem to support some potential and concomitant immunologic mechanisms in autoimmune diseases, such as basophil-dependent (self-reactive) IgE and IL-17 production. Probably, IgE plays no direct role in the pathophysiology of these clinical manifestations, but the immune imprinting to produce IgE and, particularly, the cellular processes and cytokine environment underlying the individual atopic constitution, might trigger a number of different mechanisms, leading to several and heterogeneous clinical disorders described in association to M. pneumoniae infection, as a final result.

ID: 293

Recording and Investigation of the Annual Incidence of the Respiratory Infections which were found under the Tongue, of the Hospitalised Children in a General Hospital (2017), according to the Demographic and Other Factors.

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Introduction: The respiratory system is the most frequently attacked system and its infections are the first cause of infection and the main cause of hospitalization at the EMERGENCY ROOM (ER). Purpose: Investigation of the annual incidents and frequency, of respiratory diseases and especially infections found under the tongue, in hospitalized children, and their association with demographic and other factors. Method-Material: During the year 2017 information was collected from the printed and electronic archive, of our clinic containing information about the children that were hospitalized. The excel program was used to keep record of cases of hospitalized children for respiratory disease and mainly infections detected under the tongue, and digitize them. Categorized by gender (Boys(B), Girls(G), age, in 4 groups (0-1), (1-6), (6-12), > 12 and in relation to the season and the month.

Results: In 2017, 931 children (C), 525 (B):56.4% and 406(G):43.6% were hospitalized in our clinic. Of the above, 140(C)(15%) were hospitalized due to a respiratory problem (89 (B): 63.5% and 51 (G): 36.5%). The seasonal and gender frequency was: Winter: 65:(B) 37, (G) 28, Spring: 34:(B) 20,(G)14, Summer:8: (B)5, (G)3. Autumn 33: (B)27, (G) 6. Concluding, 70.7% were hospitalized during the winter and spring, followed by autumn with 23.6% while Summer had the small percentage of 5.7%.1 in 2 children with respiratory problems, were accompanied by high fever and about half of them had high infection rates. Only 5 infants (3.5% of the total with a respiratory problem, 17% of the transferred) were transferred to a tertiary-hospital,4(B),1(G),aging(7,3,2,1,7,0.5) in months. The distribution of the total number of children according to their age group in years was: 1st: (0-1): 66 C, 2nd: (1-6): 51 C, 3rd: (6-12): 18 C, 4th: 12): 5 C. The average duration of hospitalization was (in days), by age group 1st: 4.2, 2nd: 2.5, 3rd: 4.4 and 4th: 6.25.

Conclusions: The prevalence of both admissions for hospitalization and the incidence of morbidity, but also in the transfers due to respiratory disease and mainly infection are the males, with a particularly high risk during infancy, especially in RSV and rhinitis epidemics, and the greater seasonal incidence and distribution of the hospitalized children is mainly related to winter and spring, events that are consistent with Greek and international bibliographic data. The medical and nursing staff members of our clinic have adequately coped with cases of respiratory problems and have minimized the transfers to tertiary-hospitals, to the most urgent cases.

ORAL PRESENTATIONS: NEONATOLOGY

ORAL PRESENTATIONS: NEONATOLOGY

Presentations

ID: 151

Age Estimation for Refugee Children in Malaysia Based on dental development: a Case Series Analysis.

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Background: United Nations High Commissioner for Refugees (UNHCR) statistics indicates that in 2016, there were around 92000 refugees and 56000 asylum seekers resettled in Malaysia, majority of them being children. One of the UNHCR's key directive for the year 2018 is to enrol 75% of school aged refugee children in primary education. Malaysia had not signed treaty with United Nations Refugee Protocol and due to this, children born to refugee parents cannot register their birth and most of them lack documentation proof of age. The age of those children becomes disputed leading to difficulty in enrolling in a school or obtaining any form of official document.

Methods: Based on request from a local charitable foundation, dental age estimation was conducted for 22 children whose ages were disputed. The claimed age of the children was provided by the parents or legal guardian and it ranged from 6 to 18 years. The children mostly originate from Somalia, Bangladesh and Myanmar. Using panoramic radiograph, all the upper and lower teeth on the left side of the arch were scored according to Anglo-Canadian classification system and dental age was estimated using population specific reference data sets (RDS) developed by dental age research group at King's College London Dental Institute. Paired t-test was used to calculate the difference between the claimed chronological age (CA) and the Dental Age (DA).

Results: The overall difference between CA and DA was -0.31 years and the difference was not statistically significant ($p>0.05$) indicating that the method employed was fairly accurate. Age wise comparison could not be performed due to less number of children in each age range. Conclusion: This case series analysis emphasize the importance of utilizing appropriate method of age estimation taking into account of gender and ethnicity of the subjects of concern. The country specific ages of legal importance and the legality of registering the date of birth based on age reports will be discussed in this presentation.

ID: 236

Cardiac Function in Small for Gestational Age Infants

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Introduction: There are some reports that cardiac functions of small for gestational age (SGA) infants are lower than those of normal newborns. Recently, new indexes for cardiac function by ultrasonography have been established.

Purpose: In this study, we tried to estimate the cardiac function of SGA by ultrasonography and clear the mechanism of its change.

Materials and Methods: We examined retrospectively the medical records of 53 SGA newborn infants who were admitted to NICU of our hospital from for 5 years. For control group, 53 appropriate for gestational age (AGA) newborn infants were recruited. Infants with congenital malformations, chromosomal abnormalities, signs of intrauterine infection were excluded. Symmetrical SGA were also excluded. The instrument used was a Philips Model iE33 Color Flow Imaging System. Recordings were obtained while the infants were asleep or resting quietly with stable heart rates. Left ventricular dimensions for fractional shortening or ejection fraction were measured using M-mode from a parasternal long-axis view at the level just distal to the mitral valve leaflet tips. The dimensions divided body surface area (BSA) were calculated. Left ventricular diastolic function was evaluated from pulsed wave Doppler interrogation of transmitral flow. The peak velocities of the early passive wave (E wave) and the late active wave (A wave) were measured and calculated the E/A ratio. To estimate ventricular wall motion using tissue Doppler method, the sample volume was placed at the lateral margin of the mitral annulus on the septum. Peak systolic (S'), peak early diastolic (E'), and late diastolic (A') myocardial velocities were determined. Statistical analysis were performed using t-test and $P<0.05$ was significant.

Results: SGA groups had significantly lower IVSd, LVPWd, and LVPWs than the control group. However, SGA groups had significantly higher IVSs / BSA, LVPWs/BSA, and LVDd / BSA than the control group. No difference was noted in EF between the two groups. SGA group had lower E, A, and E / E' than the control group.

Conclusion: These data indicate low early diastolic function and low atrial systolic function in SGA infants

ID: 156

Diagnostic Test of Acute Kidney Injury Using Cystatin C Compared to Serum Creatinine in Critically Ill Neonates

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Introduction: Acute kidney injury (AKI) was the primary cause of neonatal morbidity and mortality. To diagnose AKI in neonate was difficult due to the lack of specific signs, symptoms, and or biomarkers. Detecting AKI in critically ill neonates was crucial to decide appropriate management and prevent complications. Cystatin C (Cys-C) was previously recognized as one of renal biomarkers that reflects renal function in neonates population and it was superior compared to others.

Purpose: The aim of the study was to determine diagnostic value of Cys-C in identifying AKI in critically ill neonates.

Materials and Method: Diagnostic test of AKI with eGFR-Creatinine as gold-standard and eGFR-CysC as index in critically ill neonates who were treated in Cipto Mangunkusumo Hospital during July to November 2017.

ORAL PRESENTATIONS: NEONATOLOGY

Results: The prevalence of AKI was 22,4%, with AKI predominance in neonates with very preterm gestational age, LBW, probable sepsis, on invasive oxygen therapy and nephrotoxic drugs. Proportion of AKI based on nRIFLE was 75% risk, 15% injury, and 10% failure. eGFR-Cys-C has sensitivity 92.8%, specificity 62.8%, PPV 41.9%, NPV 96.8%, LR(+) 2.50, LR(-) 0.11, and accuracy 69.6%. The AUROC for Cys-C was 92% with sensitivity 85.7%, specificity 86.6%, PPV 64.9%, NPV 95.5%, LR(+) 6.39, LR(-) 0.16, and accuracy 86.4%. The optimal cutoff value for Cys-C was 1.825 mg/dL.

Conclusion: Cys-C can be used as screening test of AKI in critically ill neonates, yet it was not superior to creatinine.

ID: 134

Effect of Education Given on Practices Supportive Oral Feeding to Health Care Professionals in NICU

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Background and Aims: The aim of this study was to determine the effect of education on practices supportive oral feeding of premature infants among health care professionals in neonatal intensive care unit (NICU).

Methods: The study was a non experimental pretest-posttest self-report survey design conducted at a medical faculty hospital in Turkey. A sample of 44 NICU healthcare professionals (nurse, midwife and physician) participated in an education course. Data were collected using the Demographic Characteristics and Premature Infant Feeding Questionnaire Form. Participants were split into groups of 8 to 10 people and the education course was completed in average one and a half hours per day for five days. Prior to the education presentation, participants completed the pretest. The posttest was completed two weeks after completion of the education course. Data were analyzed using IBM SPSS Statistics 22.0 and paired t tests was used.

Results: The average age of the participants is 26.14±4.81. Of the 44 participants, 84.1% were nurse, 13.6% physicians, 2.3% were midwives and 88.6% were female. While 63.6% of the healthcare professionals had NRP certification, 70.5% of them did not have the neonatal intensive care unit nursing certificate. It was determined that 40.9% of the participants were not educated about premature infant feeding, while those who participated in the training were found to receive breast milk training in the context of in-service training. The mean rate of correct pretest answers was 58.69%, whereas the mean rate of correct posttest answers was %78 ($p<0.001$)

Conclusion: It has been determined that the education given on practices supportive oral feeding improves knowledge the healthcare professionals'.

ID: 150

Evaluation of Maternal- Baby Attachment Level of Mothers Applied to Primary Health Care Center

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Background and Aims: Maternal-baby attachment is of great importance for the children's physical, psychological and intellectual development and it provides that well-being throughout the life of the child. In this research article, it is aimed to evaluate maternal-baby attachment levels of the mothers who applied to a primary health care center in Konya when their baby was one month old.

Method: The study was performed as a descriptive relational study. The population of research was constituted by 100 mothers who were apply to primary health care center. The data were collected to mothers who agreed to participate in this study. The data were collected by "Identifying Information Form" consisted of 25 questions and ' Maternal Attachment Inventory'. For data analysis descriptive statistics (number, percentage, mean, standard deviation) were used .Same time İndependent t test, Man- Whitney U, One-Way Anova and Kruskal Wallis variance tests were used for data statistics in independent groups($p<0.05$ meaning level).

Results: The mothers of 58% were in the age range of 25-34 years. The mean Maternal Baby Attachment score was 96.81± (7.33). The relation between Maternal Baby Attachment Inventory score and type of family, type of birth, pregnancy rate,planned pregnancy, being primiparous mother, intended sex of baby were found significant ($p<0.05$).

Conclusion: Research article showed that the nurses, especially pediatric nurses, who have an important responsibilities this subject. Pediatric nurses have a professional nursing approach in the context of family centered care who are the most influential people in starting and maintaining the maternal-baby attachment process. At the same time nurse trainers should closely follow current knowledge and there is a need for more randomized controlled studies to improve the level of evidence of new nursing approaches in this subject.

ID: 231

Immunization Status of Newborns in General Hospital Kumanovo During the Period 2014-2017

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Introduction: There has been active public campaign by groups / individuals to present vaccination in a negative connotation.

Purpose: To present the immunization coverage of newborns within a four year period.

Material and Methods: Data was collected from the annual reports of the department of neonatology.

Results: In 2014 out of 1579 newborns, 1446 were vaccinated with BCG (91.58%) and 1555 (98,48%) against Hepatitis B. Total of 1152 (82.22%) were vaccinated with BCG and 1361 (97.14%) against Hepatitis B out of 1401 newborns in 2015. Out of 1393 born in 2016, 1252 (89.88%) were covered by BCG and 1365 (97,99%) newborns were vaccinated with Hepatitis B vaccine. Out of 1377 born in 2017, 1261 (91.58%) were covered by BCG, a 1353 (98,26%) with Hepatitis B vaccine.

Conclusion: The immunization status of newborns in our hospital is on a satisfactory level and does not record a declining trend despite the anti-vaccination campaign. Medical contraindications for immunization were the only reason for not implementing the immunization. There were no refusal requests by parents for vaccination during the period 2014-2017.

ORAL PRESENTATIONS: NEONATOLOGY

ID: 161

Improving the Use of Sucrose as Analgesia in the Neonatal Unit, Wishaw Hospital

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Introduction: Sucrose has consistently been found to be a safe and effective analgesic in neonates. However, it is frequently underused and poorly documented. In addition, studies suggest that repeated exposure to pain as a neonate can heighten responses to pain later in life and have long-term implications in psychosomatic response to pain.

Methods: We collected data on 51 babies discharged from the Neonatal Unit in Wishaw in January 2018. Data was collected on demographics including gestation, length of stay, number of painful procedures and use of analgesia. Painful procedures included heel pricks, venous cannulation, lumbar punctures and intramuscular injections. We also distributed 30 questionnaires to staff in the unit to ascertain their views on the use of sucrose in our department. We performed two interventions from February to March 2018. The first was staff education sessions: one for medical staff, and six smaller sessions for nursing staff. The second intervention was the introduction of a sucrose documentation sheet to prompt staff to administer sucrose prior to painful procedures as well as to promote more reliable documentation of its use.

We then re-audited our use of sucrose in 36 babies admitted to the unit in May 2018 post-intervention.

Results: Questionnaire results showed that 73% of staff felt sucrose should be used as analgesia in all babies regardless of gestation or respiratory support. 60% of staff felt that sucrose was being used less than 50% of the time prior to painful procedures. 100% of staff felt sucrose was an effective painkiller and 97% of staff felt we could provide better analgesia by increasing our use of sucrose. Demographics between the January and May baby cohorts were similar, 67% of babies in both cohort were >37 weeks and 28% of babies in both cohort were 32-37 weeks. Babies in January underwent an average of 12 painful procedures with a cumulative 627 procedures in all 51 babies. Babies in May underwent an average of 10 painful procedures with a cumulative 349 procedures in all 36 babies. Prior to interventions, sucrose was documented as given in 1/51 babies in January 2018, in a total of 1/627 procedures. Following staff education and the introduction of the sucrose sheet, 27/36 (75%) babies had documented use of sucrose during admission, in a total of 78/349 (22%) painful procedures (0.16% pre intervention, 22% post, $p<0.0001$).

Discussion: Following staff education sessions and the introduction of a sucrose administration sheet, the documented use of sucrose as analgesia in babies in the neonatal unit has improved, with 75% of babies now having documented use of sucrose during their admission. The sucrose administration sheet is currently under consideration for implementation across the West of Scotland deanery.

ID: 233

Late Preterm: A Big Challenge

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Introduction: Late preterm (LP) infants are defined as those born at 34 to 36-6 weeks gestational age, these newborns are not fully mature and the last 6 weeks of gestation represent a critical period of growth and development for them. The increase of premature newborns with lower gestational ages, means that the stable LP are not admitted to the NICU. These newborns need specific care and monitoring from medical professionals. The LP, compared with term neonates, are at increased risk for feeding difficulty, jaundice, hypoglycemia, temperature instability and respiratory distress, leading to an increase in the number of days of hospitalization.

Purpose: The aim of this study was to evaluate the incidence of late preterm in the regular newborn service, their characteristics, problems during hospitalization and their follow up.

Material and Methods: A retrospective study was conducted based on the medical records of the LP admitted to the regular newborn service of Centro Hospitalar São João (Portugal) between January 2016 and December 2017. We excluded babies admitted at birth to the NICU and those who didn't meet the service´s protocol of admission to the regular nursery (birth weight < 2000g or < 34 + 5/7 weeks).

Results: 267 LP were included in this study with an incidence of 5,2% of births. The mean maternal age was 32 years. 51% were male. 50% were born by cesarean section. 28% were twins. The LP were distributed: 34 and 0/7 weeks 3 newborns, 35 and 0/7 weeks 78 newborns and between 36 and 0/6 weeks 186 LP. The average weight was 2560 grams and 20% were Small for Gestational Age. 82% LP had some problem related to their prematurity, among which: 167 had feeding difficulty, 141 jaundice, 73 hypoglycemia, 34 LP had respiratory distress and 28 temperature instability. Approximately 10% of these newborns were admitted to NICU because of these problems. 51% increased the number of days of hospitalization, regardless of the type of delivery, with an average increase of 2.6 days. 79% LP had at least one follow up consultation.

Conclusion: Preterm birth is an important public health matter. The late preterm are increasing, being a problem in hospitals, due to the morbidity associated with their prematurity. LP need to have a strict monitoring system in the nursery, (most of them don't need to be in the NICU) with a highly qualified, specialized and adequate staff number.

ID: 205

Newborn in the Emergency Department

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Introduction: Despite the paediatric emergency department being home to a vast array of transmissible infectious pathogens, this is the first place many caregivers choose to bring their unwell newborn.

Purpose: Our main focus was to characterize this group and analyse the motives behind parents' decisions to take their children to a pediatric emergency department. We believe that the information collected might be useful for strategizing the risk mitigation and optimization.

ORAL PRESENTATIONS: NEONATOLOGY

Materials and Methods: We conducted a retrospective analysis of all newborn admissions to the paediatric emergency department of our level II hospital during the 2016 and 2017 years. Unrepresentative admissions (e.g. inter-hospital transfers) and cases with unusable data (e.g. dropouts) were excluded from analysis.

Results: A total of 855 newborn admissions on the paediatric emergency department were accounted, of which 50 cases were excluded. The mean newborn age was 15.2 days old and the mean mother's age was 29.8 years (range 14-46 years). The majority (72.9%) of cases were prompted by the caregiver's initiative, 20.9% were referred by other health professionals and 6.2% were the result of scheduled re-evaluations. The most reported cause by the caregivers was crying or irritability followed by nasal obstruction, coughing and rhinorrhoea. The most commonly observed diagnosis was acute nasopharyngitis, followed by colic. Diagnostic tests were requested in 44.7% of cases. The mean emergency department length of stay was 1.98 hours. Newborns referred by other health professionals had a higher rate of hospitalization and diagnostic tests requirement compared to the other newborns (32.1% vs 15.7% and 76.8% vs 35.7%, respectively). The global rate of hospitalization was 18.8%.

Conclusion: The majority of visits to the emergency department in this period may have been solved in a primary healthcare setting. The high count of re-evaluations demonstrates the high degree of suspicion required for this age group, although it is uncertain whether the emergency department is the most adequate place for a re-evaluation. Nevertheless, we couldn't find an alternative to this daily and accessible service. Further awareness programs directed to the caregivers, as well as providing training to the primary healthcare services are fundamental to guarantee an overall better quality of healthcare services provided to the newborns, reducing the risk of exposure to the environment of paediatric emergency departments.

ID: 153

Association Of Pediatric Tuberculosis With Second Hand Smoke Among 1-12 Years Old Children In Karachi, Pakistan: A Case Control Study

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Introduction: Tuberculosis (TB) is ancient infectious disease, but it still remains a substantial global health problem. TB is the most common cause of infection related death worldwide. Childhood TB is neglected public health issue.

Objectives: To determine the association between childhood TB and second hand smoke (SHS) among children aged 1 to 12 years in Karachi.

Study design: Hospital based, age matched case control study

Setting: Civil hospital Karachi and Sindh government hospital New Karachi

Duration of study with dates: The study took one year for completion. Data collection was completed in nine months, data entry analysis 2 months and one month for write up.

Subjects and methods: 174 cases and and 343 age matched controls were recruited. Physician diagnosed cases of TB based on Pakistan Paediatric Association Scoring Chart for Diagnosis of Tuberculosis (PPASCT) and children aged 112 years coming to the same hospital with diseases diagnosed other than tuberculosis were enrolled as controls.

Results: Children exposed to SHS at home mOR(95% CI): 1.18 (0.682.06) and exposed to SHS outside home mOR(95% CI): 1.89(0.685.24), living with a TB patient mOR(95% CI): 8.05 (4.5914.10), and female children mOR(95% CI): 1.90 (1.133.20) were more likely to develop TB in overall sample. While for the children under 5 years old risk of TB was strongly associated family history (mOR: 28.83) and exposure to SHS at home (mOR: 2.89).

Conclusions: Childhood TB was associated with contact to TB patient, not child not vaccinated for measles, and female sex. Exposure to SHS at home in under 5 children while SHS outside home for older children contributed to development of TB. So we need to focus on smoke free environment for our healthier future generation.

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Presentations

ID: 250

An African Child's Tale of Toxic Epidermal Necrolysis

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Introduction: Toxic Epidermal Necrolysis (TEN) is a variation of Stevens-Johnson's disease that encompass widespread epidermal necrosis of the skin and mucosa. Classification is based on affected body surface area (BSA). TEN occurs when >30% of BSA is implicated and is oftentimes related to a severe adverse reaction to a medication. Though rare, with an incidence of 1-2 cases per million, TEN is a potentially life-threatening condition. SCORTEN scale is frequently used to assess disease severity. Reports on child mortality go up to 7%. In sub-Saharan Africa, epidemiological data on TEN is lacking, although it is thought to contribute to a substantial burden in children healthcare and welfare.

Clinical Case: An 8-year-old boy living in a rural site in São Tomé and Príncipe islands, was diagnosed with tonsillitis at a local Health-Centre and was given amoxicillin oral tablets. 5 days later a quickly-spreading blistering rash and acute conjunctivitis started, with no associated fever. Upon examination at the Pediatric Emergency Department the patient presented with tender erythematous lesions with a necrotic base, large painful erosions and flaccid bullae mainly spread across the face, abdomen, trunk and limbs, largely surpassing 30% of BSA. Oral mucosa and periorbital oedema were also observed. The patient was admitted with intravenous fluid replacement and broad-spectrum antibiotics. Blood tests and hemodynamic monitoring were not readily available, but the patient remained stable. Referral to Dermatology was made, and in collaboration, a presumptive diagnosis of TEN was established, even though skin biopsy was not available. SCORTEN was not assessed due to lack of data. Together with the previous treatment plan, cleansing, regular dressings and skin care were provided, resulting in a steady recovery with no further complications. The patient was discharged after 25 days with widespread skin depigmentation and minimal scarring. Advice against use of amoxicillin or similar antibiotics was given, though the patient did not comply with recommended follow-up.

Discussion: Clinical assessment of TEN is difficult due to overlapping differential diagnosis. However, it should always be considered when a great BSA is involved. In Developing countries, lack of clinical resources is often found and further complicate management of disease. Thus, a thorough history and clinical exam are fundamental to assess severity and point to available treatment options. When addressing TEN, supportive measures may increase survival and expedite recovery. This case shows the importance of early recognition of symptoms and management to prevent further complications.

ID: 261

A case of Catastrophic Antiphospholipid Syndrome in a Previously Healthy 14 year old Emirati Male

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Background: Antiphospholipid syndrome is a systemic autoimmune disorder characterized by venous or arterial thrombosis in the presence of persistent laboratory evidence of Antiphospholipid antibodies. APS occurs as a primary condition, or in the presence of systemic lupus erythematosus or another autoimmune disease. Catastrophic APL is the development of thrombotic disease with multiorgan failure, which has its diagnostic criteria. It occurs in 0.8% of patient with APL, with mortality rate of 50% despite treatment with anticoagulants & immune suppressants. Survival rate decreases by 90% in 5 years.

Case Summary: A 14 year old previously healthy boy presented with abdominal pain & headache for 1 day. On arrival he was noted to have high blood pressure readings, which were persistent through the day. Headache & abdominal pain both were dull & worsening. He was shifted to a secondary level Hospital, in which CT head was done, reported to be normal. US kidneys done showed hypo-echoic R kidney with normal vessels bilaterally. Abdominal MRI done showed R renal infarct. Due to failure to relieve the headache & to control the BP despite IV labetalol, he was shifted to PICU. On arrival, he was still having headache, high BP readings with high Creatinine, other investigations were unremarkable. Investigate for thrombophilia, brain MRI & fundus exam by Ophthalmology. MRI brain showed multiple aneurysms with massive sinus venous thrombosis. Thrombophilia workup showed prolonged aPPT not corrected with mixing study, but correcting when mixed with phospholipid, ESR was elevated, Antiphospholipid antibodies (anticardiolipin & Anti-beta2-GP) were both positive. During his stay, he was treated with 4 antihypertensive which barely controlling the BP. Also was on Paracetamol, ibuprofen & morphine for the headache. No antibiotics were started, as the history, examination & labs were not suggestive for infection. Once diagnosis of Antiphospholipid was confirmed, heparin was started then shifted to warfarin when the condition of the patient was stabilized. He stayed in the PICU for around 10 days then 3 weeks in the general pediatric ward for treatment adjustment & rehabilitations. He was discharged home with no neurological sequel; his renal function was improving gradually over time. This is the 2nd case to be diagnosed in our center SKMC in duration of almost more than 12 years.

Conclusion: Antiphospholipid syndrome is an uncommon disorder especially in pediatric population & moreover in males. Also, presenting & being diagnosed in a "Catastrophic state" is also very rare and is associated with high morbidity & mortality. Quick action, diagnosis & starting treatment on time, gave the patient the chance to survive the catastrophic state with considerable good recovery.

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ID: 213

A Tender Migratory Rash - Sweet Syndrome in a Paediatric Patient

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Introduction: Paediatric Sweet Syndrome (acute febrile neutrophilic dermatosis) is a rare systemic, autoinflammatory condition characterised by the abrupt onset of tender erythematous plaques and nodules on the skin. Sweet syndrome is a rare diagnosis in the Paediatric population, with fewer than 100 childhood cases documented in medical literature (1). We would like to present a case of a boy with this condition who presented with a tender migratory rash.

Objective: To give prominence to the consideration of Sweet Syndrome as a differential diagnosis of a tender rash in the Paediatric population.

Methods: This case study will utilise retrospective analysis of the patient's electronic medical records, in conjunction with parental consent. The patient's clinical, laboratory and pathological data will be analysed.

Case Description: A 12-year-old boy presented with a tender macular, non-pruritic, 'burning' rash that commenced on the left side of his face before progressing to the right side of his face and left arm. For 2 weeks prior, he had a history of headaches, fever and lethargy. The child had a background of long-standing hypertension. Systemic examination was unremarkable other than a mucosal ulcer. Despite no vasculitis, infectious or autoimmune causes found after extensive investigation, he was prophylactically treated for bacterial meningitis with antibiotics. His ASOT titres also returned elevated. During admission the lesions had crossed dermatomes and formed localised groups in both arms and legs. A punch biopsy revealed neutrophilic infiltration and a working diagnosis of Sweet's syndrome was established. He was treated with systemic corticosteroids and colchicine whilst they were tapered.

Conclusion: Due to its rarity, the presentation of Sweet syndrome in the Paediatric population is varied. Patients with this condition may present with numerous extracutaneous manifestations (2). Given the high recurrence rate of this disorder in children and its potential association with an underlying hematological malignancy, Sweet syndrome should be considered an important differential in a child presenting with a tender migratory rash.

ID: 140

Nutritional Disorders and its Correction in Children with Juvenile Idiopathic Arthritis (JIA)

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Introduction: Disturbance of alimentary status represents a serious problem for patients with chronic diseases, however nutrition condition in children with JIA is underestimated.

Purpose: To study nutritional status and its correction expediency in patients with JIA. 50 children with severe JIA 2-18 years of age and 50 healthy children of similar gender, growth and age (control group) were examined using clinical, anthropometric, biochemical and bioimpedance methods. 5 children had systemic variant of JIA, 28 - poly- and 17 – oligoarthritis. All patients received basic therapy, 12 children received corticosteroids, 10 – TNF-α inhibitors. For nutrition disturbance correction 10 children received Peptamen (or – Peptamen-junior) – serum-peptides formula in addition to usual diet (10-20 ml/kg/day or 200-600 kkal/day in 4-6 intakes).

Results: In 12% of patients body mass index (BMI) was less than 5th and in 14% more than 95th percentile. 8% of patients had rheumatoid cachexia. The low BMI was represented in cases of high disease activity, the high BMI was associated with corticosteroids administration. 18% of patients had mild, 6% – average and 2% - severe protein-energy deficiency, which was typical for children with systemic and seropositive polyarticular variants of JIA with high level of disease activity. These patients had the low presence of muscular tissue and normal or high body fat mass in bioimpedance. Nutrition disturbances (ND) in 7 (14%) of children were combined with of waist circumference enlargement, dyslipidemia and hyperuricemia. Insulin-resistance and metabolic syndrome diagnosed in 12%. In patients with mild ND transferrin level depression (2,12+0,14 vs 2,97+0,21 g/l in control group) was noted, while with average and severe ND - in addition hypoalbuminemia and lymphopenia. Both reduction of shoulder muscles circumference and of skeleton-muscular mass share were revealed in JIA patients compared to healthy children. Within 20 days Peptamen administration has normalized visceral protein concentration in all children with average and one – with severe ND, contributed to general condition improvement and urinary acid level normalization in all patients.

Conclusion: In systemic and severe polyarticular variants of JIA alimentary disorders take place, which can be successfully corrected by peptides formula.

ID: 168

Chronic Abdominal Pain – Be Sure Not to Overlook the Rare Causes

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Introduction and Purpose: When looking at a patient with recurrent abdominal pain, an organic cause should always be considered. Delayed diagnosis has a significant impact on the clinical and nutritional status of the patient, thus affecting the long-term prognosis.

Materials and Methods: We present the case of a six-year old patient who was admitted in the Paediatric Gastroenterology Department of "Grigore Alexandrescu" Emergency Children's Hospital with chronic abdominal pain, constipation and important abdominal distension. After a complete work-up a congenital intestinal malformation was diagnosed.

Case Description: The medical history of the patient revealed constipation with onset at two years. The patient had no previous history of abdominal surgery or trauma. She was evaluated for Hirschsprung disease with contrast enema and the diagnosis was excluded. The patient received various treatments for constipation. There was an improvement in the stool consistency, but she continued to present repeatedly with

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abdominal pain and loss of appetite. The repeated paraclinical work-ups she underwent both in out-patient clinics and during hospital stays excluded frequent causes of chronic abdominal pain and malnutrition: coeliac disease (serology and biopsy), food allergies, inflammation and infections. Functional pain remained the suspected diagnosis. Mother continued to self-medicate using homeopathic treatment. The nutritional status of the patient worsened; she associated weight loss, marked abdominal distension and recurrent abdominal pain.

Results: The clinical exam at admission revealed altered general state and severe malnutrition W=12,5 BMI 12, percentile 0,1, Z score = -3,8, diffuse abdominal pain, abdominal distension with important peristaltic waves. Abdominal ultrasound revealed an enlarged intestine. This result was confirmed by abdominal computed tomography. At this point, a decision to perform a laparoscopy was made. The intraoperative finding was jejunal obstruction at 120 cm from the duodenojejunal junction due to congenital adhesion band. After resection the clinical status improved remarkably and the child soon resumed growth.

Conclusion: Congenital adhesion band is a very rare condition among children. Small bowel obstruction due to congenital adhesion band can be a challenging diagnosis. There is no imaging study that can establish the positive diagnosis and exploratory laparotomy or laparoscopy are the only means for diagnosis and treatment. Optimal management (diagnosis and treatment) will have a positive impact on the clinical status and also on long-term development and growth.

ID: 230

A Case of Iron-Deficiency Anemia and Pica: What Happened First?

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Introduction: Pica is defined as compulsive ingestion of non-nutritive substances, observed especially in children and pregnant women. The etiology is poorly understood, probably multifactorial, but its association with iron deficiency is widely recognized. Besides social stigmatization, pica may evolve with adverse outcomes.

Purpose: To describe a case of allotriophagy in a children and the investigations for potential causes and complications.

Case Description: A 9-year-old girl was observed in the emergency department (ED) for chest pain and palpitations in the previous days, which began after school return after the holidays. She was already accompanied at the child-psychiatry outpatient clinic for a history of pica and stuttering since 6 years of age. She started eating styrofoam initially, then thread in clothes and elastic hair bands, with progressive worsening in recent months. She related these behaviors to periods when she felt more anxious, with no other depressive symptoms. She initiated psychotherapy, speech therapy and a few weeks later, fluvoxamine. She was referred to pediatrics consultation after ED visit, where she complained of constipation and output of textile threads in the stool. Her growth charts showed adequate evolution (weight and height in P50-75 and P90, respectively). She had pallor and angular cheilitis, remaining physical examination was normal. Her laboratory tests revealed microcytic hypochromic anemia (hemoglobin 8.4 g/dL, mean corpuscular volume 58.9 fL) and severe iron deficiency (ferritin 3.9 ng/mL).

Results: Oral iron supplementation was initiated; after two months of treatment she maintained iron-deficiency anemia: hemoglobin 9.9 g/dL, ferritin 7.8 ng/mL. Meanwhile, fluvoxamine doses was increased and she initiated alprazolam, because there was no clinical improvement of pica. Since there was a poor response with oral treatment, it was decided to switch to intravenous iron. The investigation of refractory iron-deficiency anemia showed celiac antibodies, fecal occult blood test and H. pylori antigen in the stool negatives. Abdominal ultrasound, requested for investigation of bezoar, showed no major changes. The patient's family reported cessation of pica episodes coincident with the time of the first infusion of iron, and subsequent resolution of constipation. Hemogram and iron stores normalized; she remains asymptomatic after five months.

Conclusions: In our case, no cause to iron-deficiency anemia was identified. Therefore, it is difficult to establish if iron deficiency contributed to pica, or if it was the result of the accumulation of fibers in gastrointestinal tract with consequent malabsorption. A multidisciplinary team approach is preferred, particularly when a concomitant anxiety disorder is present.

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Central Nervous System Infection by Listeria Monocytogenes in One Patient Under Steroids Treatment

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Introduction: Listeriosis is a severe and uncommon infection which can invade tissues normally resistant to infection, such as the central nervous system, leading to life-threatening meningitis and encephalitis. Cellular immune response plays an important role in protective immunity.

Case Report: Ten year-old girl, from Sao Tome and Principe, with hepatic cirrhosis due to autoimmune hepatitis, under steroid treatment for the past three months, presented with a 4-day fever, headache, myalgias, cough, abdominal pain and diarrhea. The next day her condition worsened with altered mental status and meningeal signs. Blood culture was positive for Listeria monocytogenes and she was treated with ampicillin plus gentamicin, while maintaining steroid treatment. Lumbar puncture was not performed due to thrombocytopenia (27×□10□^9/L). EEG and Head-CT scan were normal, while MRI showed an enhancing micronodular lesion, in mammillary bodies with peripheral reinforcement and perilesional edema that was interpreted as a small abscess. She evolved favorably, with complete resolution of clinical and radiological signs and symptoms, having completed 31 days of IV ampicillin and 18 days of gentamicin. She was discharged on oral amoxicillin and maintained an outpatient follow-up.

Discussion: Listeriosis should be investigated in all patients with cellular immunosuppression who present febrile symptoms. The central nervous system may be the only area of the body infected and patients may present with focal neurological signs or disturbed states of consciousness. While brain abscess is rarely found, rhombencephalitis composes a rare but characteristic form of neurolisteriosis, as in our patient. The duration of therapy depends on the clinical syndrome, the presence of underlying disease and the response to treatment. Establishing suitable treatment as early as possible can improve the prognosis.

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Deficient Expression of Gene, Immune Mediators, Neurotransmitters and Behaviors From Newborn to Adolescence Using Observation by Maternal Immune Activation Offspring Model

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Introduction: Incidence of children with autism is related to gene expression, immune response and changes of neurotransmitters; however, the molecular mechanism is unknown. The murine maternal immune activation (MIA) offspring model enables longitudinal studies exploring aberrant social behaviors similar to those observed in humans.

Purpose: This study aimed to investigate the changes of expression of cerebral genes, cytokines, chemokines, and neurotransmitters at newborn and adolescence, observed by MIA offspring model.

Materials and Methods: MIA was induced using the following lipopolysaccharide subcutaneous injection conditions: 25 μg/Kg on gestational day 15, 25 μg/Kg on day 16 and 50 μg/Kg on day 17. As controls, pregnant mice were injected with 500 μL phosphate-buffered saline (PBS) on day 15, 16 and 17. The brains of the offspring (n=6-10) at newborn and adolescence were excised and evaluated their gene, cytokine, chemokine and neurotransmitter expressions. The social behaviors (n=30) were estimated using elevated plus maze, three-chambered and home-caged behavioral tests at adolescent stages.

Results: The social deficit behaviors on elevated plus maze, three-chambered and home-caged behavioral tests were appeared at MIA adolescent offspring. As compared to PBS-treated controls, the gene expression of interferon-stimulated (gbp3, irgm1, ifi44) was up-regulated and serotonin synthesizing enzyme (tph 1) was downregulated at newborn while, at adolescent stage, immunodevelopmental transcription factor (egr2) and hormones (pomc, hcrt) were up-regulated and serotonin synthesizing enzyme (tph2) and serotonin transporter (slc6a4) were down-regulated. The cerebral IL-6 levels were endogenously up-regulated, but L-selectin levels were downregulated at adolescent stages. Moreover, the cerebral serotonin concentration was significantly decreased at adolescence.

Conclusion: We concluded that MIA induced by exposure to LPS decreased cerebral serotonin levels in parallel to the down-regulation of the tph2 and slc6a4 genes and in conjunction with social deficit behaviors similar to autism in offspring. Potentially, the social deficit behaviors were induced via the interplay among immune response, neurotransmitters and developmental genes for a long-term.

ID: 234

Effect of One Session Whole Body Vibration on Respiratory Muscle Strength in a Child with Polyneuropathy

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Introduction: Polyneuropathy (PNP) is damage or disease affecting peripheral nerves in roughly the same areas on both sides of the body. PNP can present with many differing symptoms, including numbness, muscle weakness, poor bladder control or respiratory problems, depending on the type of nerve involved. Whole-body vibration (WBV) has been used in different populations as a new and effective intervention method to improve balance, postural control and muscle strength. The immediate effect of WBV on respiratory muscle strength have not been studied yet.

Purpose: The purpose of this study was to investigate the effect of one session WBV on respiratory muscle strength and functions in a case with polyneuropathy.

Case Description: A 12-year old male child with chronic demyelinating polyneuropathy received five bouts of 3 minutes of WBV therapy with 2 minutes of rest between bouts (total 15 minutes WBV) at 20 Hertz in a standing position. Before and after the WBV, maximal inspiratory (MIP) and expiratory pressure (MEP) measurements and pulmonary function test measurements were done.

Results: Before and after the WBV, respectively, MIP values were 46-54 cmH2O ,MEP values were 75-79 cmH2O, FVC values were 85%-87%, FEV1 values were 80%-84%, FEV1/FVC values were 96%-99% and PEF values were 74%- 75%.

Conclusion: Especially MIP and MEP values of the child with polyneuropathy were lower compared to their peers (Heinzmann-Filha et al,Respiratory Medicine 2012;106,1639-1646). One session WBV improved respiratory muscle strength. Future studies are needed to investigate whether WBV is an effective on respiratory muscle strength and functions.

ID: 277

Intellectual Disability and Development Delay in Children - Looking for a Cause

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Introduction: Identifying a cause for intellectual disability (ID) and development delay (DD) in children enables a condition-specific approach, prediction and timely management of medical comorbidities, and if pertinent, genetic counselling to the individual and his family. Chromosomal microarray analysis (CMA) is a technique that allows the diagnosis of some genetic conditions. CMA is recommended as first-tier test for genetic evaluation of children with unexplained ID and DD.

Purpose: To calculate the diagnostic yield of CMA in a population of children followed in a Neurodevelopment Outpatient Clinic.

Materials and Methods: Retrospective review of medical records of children who underwent microarray analysis between 2011 and 2016. Collected data included child's clinical features, CMA reports and etiological investigation made prior and after the microarray technique.

Results: Out of a total of 116 children studied with CMA, 64% were male and the average age at the time of the test was 10,7 ± 3,8 years. Children frequently had more than one clinical indication for CMA: 85% had intellectual disability, 60% had development delay and 43% had dysmorphisms. Previous genetic investigation was done in 97% children. Of those, 93% had molecular analysis of Fragile X syndrome, 70% had done karyotype analysis and 22% underwent phenotype directed tests. Abnormal CMA results were reported in 41%, with a total of 63 copy number variations (CNV), 1–4 per individual. Deletions comprised 62% of all abnormalities, duplications 32% and loss of heterozygosity events 5%. To assess the clinical significance of the CMA, patient's direct family testing was done in 51% of children. In 36% of the abnormal results the clinical significance

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of findings remained unknown; 26% were classified as non-etiological; 21% were defined as pathogenic or likely pathogenic; and 15% had polymorphisms present in the normal population. The overall diagnostic rate (percentage of total patients with pathogenic CNV) was 9%. Further genetic investigation was conducted in 17% of children with abnormal CMA and in 19% of children with normal CMA.

Conclusion: Although CMA is one of the genetic analysis with better diagnostic yield, in our study variants of unknown clinical significance were high (36%), family tests were needed in half of those with altered results and further genetic investigation was requested for 18% of the total sample. Deciphering the clinical significance of CMA can be challenging, as the capacity to detect abnormalities is greater than clinician's ability to interpret their role in ID and DD.

ID: 263

Management of Childhood Epilepsies with non Adequate Seizure Control by AEDs

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Introduction: Childhood epilepsies a heterogeneous group of disorders and syndromes with different severity, prognosis and treatment. The purpose of study was to recognise the possible reason of failed AED treatment and to find the ways to overcome it.

Methods: 36 patients with different forms of epilepsy aged from 3 months to 16 years not the candidate for surgical treatment have been studied. The long duration EEG, high resolution MRI, biochemical, lactate level, genetic investigation were performed to these children.

Results: in 11 children the respiratory chain disorders confirmed by mtDNA sequence were found. Metabolic diseases were discovered in patients: two glutaric aciduria type1, one – glutaric aciduria type2, one propionic aciduria, one methylmalonic aciduria, one Gaucher type3, two patient with glycogenosis type9, two patients with ceroid lipofuscinosis type 2 and 6. Genetic epilepsies with mutation in genes SCN8A (two patients), GRIN2A, KCNMA1 and duplication 15q11.2q13.3, c.1312G>A in SRPX2 , were revealed. In other cases with normal MRI the reason of pharmacoresistant seizures was not discover yet. In children with metabolic disorders and energy metabolism disorders we use the specific therapy(diet, L-carnitine, vitamins, enzyme replacement therapy etc) in cases which it possible, avoid valproic acid in treatment, as well we use the phenytoin in patient with potassium channel mutation. These treatment management leads to reduction in seizures frequency or even to seizures remission in some cases.

Conclusions: The recognition and diagnostic of underlying the etiologies of intractable seizures improve the treatment management in many cases.

ID: 171

Recurrent Febrile Seizures – Doose Syndrome

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Introduction: Febrile seizures have an incidence of 4-5% of the pediatric population from 0-6 years. Incidence in males than in females 1.5:1. Simple 3-15 minutes and complex 15-30 minutes. Its physiopathology is unknown, associated factors such as increased circulation of toxins, myelination deficit in immature brain, immaturity of thermoregulation mechanisms, increased oxygen consumption, in any febrile process.

Objective: To describe the etiology and evolution of the case treated in a second level private hospital in Mexico.

Clinical Case: Male, son of 30-year-old healthy mother, 35-year-old healthy father, second pregnancy, weight 3.2 kg, size 49 cm, Apgar 8-9 term, obtained by scheduled cesarean section, exclusively breastfed 6 months, complete immunizations, normal psychomotor development. Parents deny history of febrile seizures or epilepsy. 7-months-old, simple febrile seizures began as myoclonic spasms on left arm, 3 minutes last accompanied by loss of consciousness, first 24 hours evolving into complex 3-5 per day of 3-30 minutes last associated with body temperature 37.9°C-38.3°C, changes in evacuation characteristics. Recurrences of convulsive seizures, same characteristic, more atonic in intervals of 30-60 days the following 5 months associated with febrile process of 38.3°C. When 13-months-old, head movements are added without loss of consciousness, 1-3 per day called 'Head Drops'.

Physical Exploration: Weight 9Kg, Height 71cm, Body temperature 37.9°C to 38.3°C, Heart Rate 124 pm, Breathing Rate 36pm, Oxygen saturation 97%, Glasgow 15, GENERAL STOOL TEST. Entamoeba histolytica, STOOL CULTURE. Salmonella enterica, LUMBAR PUNCTURE. Normal. Negative Icr culture, ELECTROENCEPHALOGRAM. Wave tip image, MAGNETIC RESONANCE IMAGING. Temporary Mesial Sclerosis.

Results: We have applied diazepam 0.3-0.5mg/kg/dose, phenytoin 20 mg/kg/day, metronidazole 30 mg/kg/day, metamizole 10 mg/kg/day, paracetamol 20 mg/kg/day, and with valproic acid 25-40 mg/kg/day, levetiracetam 30 mg/kg dose and clobazam 0.1 to 0.3mg/kg/day oral the crisis has been controlled. Psychomotor development has been normal. The etiology of the crises in this case is cryptogenic.

Discussion and Conclusions: Children under 12-months-old with febrile convulsive seizures have a 50% risk of recurrence with body temperature below 38°C at the time of the crisis and recurrence in the same febrile outbreak. The seizures were refractory to antiepileptic drugs, behaving as a Syndrome of Epilepsy with myoclonic-atonic crisis; as described by Doose in 1970; children are previously normal, with a history of febrile seizures in 11-28%, the evolution of this syndrome is variable, 50-89% stops having crisis after 3 years, 58% with a normal IQ.

ID: 194

The Concept of Self-Reference in Autism

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Introduction: Autism is a disorder in the individual's communication with others. But, what is the relationship of the autistic person with his/herself? How is the autistic person self-referred? Does communication disorder in autism not only related to interpersonal relationships but also to the intrapersonal self-referential relationship of the individual with himself/herself?

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Purpose: Investigation of self-reference in autism.

Materials and Methods: Literature review.

Results: Main finding in autism is the disorder of mirror neurons. Mirror neurons are activated when the individual observes someone else's actions and when the individual performs the same actions him/herself. Mirror neurons teach me empathy and sympathy for the other individual, but also for myself. Consequently, in autism there is a deficit both in the interpersonal social interaction of the individual with others but also in the intrapersonal self-referential relationship of the individual with himself/herself. Clinical features of autism related to the way an autistic individual refers to himself/herself are: 1) Sensory disorders: Sensory disorders occur in 90% of autistics: they look for intense stimuli (intense music, intense skin pressure), they do not tolerate sensory overload (they cannot wear certain fabrics, eat particular foods), or they do not respond at all to normal sensory stimuli (while the acoustic pathway is intact, they do not respond to the call of their name). 2) Reaction to pain: Autistic children often have an increased pain threshold. 3) Self-injuries: Self-injuries occur in 25-50% of autistics. The more limited the ability of the autistic individual to communicate (and hence interpersonal skills), the greater the likelihood of such behaviors, suggesting indirectly that there is a correlation between interpersonal relationships and the relationship of one's self, and that a disorder at one level implies a disorder at the other one. The above clinical features suggest that in autism the relationship with the self is deficient, and that is why the individual performs actions (sensory disorders, self-injuries, low reaction to pain) that could enhance it.

Conclusions: In autism it is not only the relationship between the individual and the others which is disturbed, but also the relationship with himself/herself. The absence of activation of mirror neurons in autistic people is a major finding suggesting this dual disorder, while the clinical features mentioned support this finding. Finally, the disturbed relationship to others comes from, or ends up in, a disturbed relationship with the self (bidirectional correlation). Expanding the rationale, does love/compassion towards the self reflects love/compassion towards others and vice-versa?

ID: 289

Adolescent-Focused Human Centred Design: A Tool for Meaningful Engagement of Young People in Health Research, Program Planning and Evaluation.

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Purpose: Human-Centred Design (HCD) is an approach to research and problem solving that actively seeks human perspective at each stage of the problem-solving process- whether that is defining or observing the problem, brainstorming possible solutions, conceptualizing a chosen action, developing a plan of action or implementing the solution. It emphasizes dignity, access, and cultural appropriateness. Although the UN Convention on the Rights of the Child states that when young people are the focus of research, they have the right to be consulted, this is not always standard practice among health researchers and development professionals doing monitoring and evaluation. The purpose of this poster is to highlight the concept of adolescent-focused HCD, providing positive examples including from our work at the Queen's University Child Health 2.0 initiative (www.childhealth2.com), and to emphasize the opportunities of this approach for paediatrics more broadly.

Focus: Adolescent-focused HCD specifically applied in the area of adolescent medicine aims to actively and very intentionally engage youth in problem solving. It recognizes that children and adolescents have a unique, and non-adult, perspective that – although not necessarily more or less valued than an adult perspective- should be specifically sought. This is particularly true because Human Centred Design principles emphasize that in order for solutions to be effective, the population of focus should be involved in the problem solving at all stages. Adolescent-focused HCD has five main iterative stages (empathize, define, ideate, create prototypes, testing). HCD has many similarities with participatory action research and integrated knowledge translation, but focuses more specifically on the creation and testing of effective solutions. Adolescent-focused HCD has been previously used to inform interventions for reduction of sexually transmitted infections, gender-based violence, injuries and substance abuse as well as to increase use of health care services by young people. Yet, it is still relatively unknown as a mainstream approach.

Significance: Adolescents represent important stakeholders and collaborators in health programming, health system research and development work that involves them. In many contexts, this is a new idea. Adolescent-focused HCD provides a structure through which meaningful engagement of young people can occur for problem solving related to health promotion, health protection, disease prevention and effective treatments.

Target Audience: The audience for this poster will be researchers and practitioners interested in finding effective ways to address adolescent health issues. It will be of specific interest to those with interest in, and possible opportunity for application of, this innovative, practical and structured way to meaningfully engage youth.

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Anorexia Nervosa and the Silent Heart Injury

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Introduction: Anorexia nervosa (AN) is a disorder characterized by fear of weight gain, and a distorted self image that can have devastating health consequences. AN is associated with cardiovascular complications: bradycardia, hypotension, prolonged QTc interval, increased QTc dispersion, atherosclerotic vascular disease, myocardial fibrosis and pericardial effusion (PE). Some of these cardiovascular changes are mild and reversible, but some may be life threatening. The lesser-known association with PE has been increasingly described in the literature and may progress to cardiac tamponade in rare cases. The etiology of PE remains uncertain, malnutrition itself may promote effusions, but low serum T3 levels (low T3 syndrome) and increased brain natriuretic peptide serum levels (BNP) may also be associated with PE.

Purpose: To describe a case of anorexia nervosa with cardiac complications.

Case Description: We report the case of a previously healthy 14 year-old female diagnosed with AN (DSM-V), with an 8-month history of a 10kg weight loss. Parental consent was obtained. She was referred to pediatric cardiology due to asymptomatic bradycardia. Physical examination: weight 35 kg (-1.80 SD), height 153cm (-1.12 SD), BMI 14.95 kg/m2 (-1.59 SD), heart rate 45 bpm, blood pressure 95/55 mmHg, body

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temperature 36 ºC, oxygen saturation 98%, she was vitally stable with normal respiration, there was no edema or signs of heart failure observed, on auscultation she had bradycardia with regular rhythm. Laboratory blood tests revealed normal estudies with complete blood count, liver and kidney functions, serum electrolytes, glucose, proteins, prealbumin, cholesterol, creatine kinase, iron, ferritin, vitamins A-D-E-B12, folate, calcium, phosphorus, zinc and cardiac troponin-I. Endocrine tests were also normal (FSH, LH, estradiol, prolactin, cortisol, ACTH, insulin-like growth factor 1-3). However, thyroid function presented an abnormal feature with low serum TSH and free T3 concentration, normal T4 concentration and serum antithyroid antibodies were undetectable. Chest radiography was normal. Electrocardiography revealed sinus bradycardia, 45 bpm, without remarkable changes. Echocardiography demonstrated a silent moderate pericardial effusion, without collapse of the right atrium in late diastole or compression of the free right ventricular wall. The refeeding regimen achieved a healthy BMI 19.5 kg/m2. Pericardial effusion and bradycardia were reversible with weight recovery.

Results: Low BMI is associated with bradycardia and pericardial effusion.

Conclusions: 1. Energy deprivation and starvation associated with anorexia nervosa have consequences on the cardiovascular system. 2. Pericardial effusion and bradycardia are correlated with low BMI and are reversible with refeeding. 3. Cardiac evaluation should be recommended for patients with anorexia nervosa.

ID: 183

Arterial Hypertension in Adolescents – Factors of Progression and Stabilization

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Introduction: Progression of arterial hypertension (AH) and development of complications occurs under the influence of various aggressive factors that impact both directly and indirectly through the formation of endothelial dysfunction, which is a marker of cardiovascular complications. The prevalence of childhood hypertension is rising in parallel with global increases in the prevalence of overweight and obesity, which is associated with premature cardiovascular complications.

Purpose: This study aimed to evaluate the significance of risk factors leading to stabilization and progressive development of AH in adolescents depending on body weight.

Materials and Methods: Arterial hypertension was studied in 120 adolescents 13 to 18 years of age, who were divided into three groups according to body mass index (BMI). The first group included 43 teenagers with hypertension and normal weight (BMI not greater than 85 ‰), the second - 25 peers with overweight (BMI ranged from 85 to 97 ‰), and the third group - 52 teenagers with obesity (BMI greater than 97 ‰). We assessed: serum level of endothelin-I, inflammatory markers (C-reactive protein (CRP), interleukin-6 (IL-6), TNF-α), microalbuminuria (MAU), as well as resting and 24-hour blood pressure monitoring, cardiac ultrasound. Endothelial function was evaluated according to the method of D.S. Celermajer, (1992).

Results: In patients with normal body weight, AH was recorded from 38,7% to 35,6% of the time of day, significantly exceeds its density as adolescents with excessive body weight (from 27,4% to 24,4%) and with obesity (from 28,1% to 26,6%, prevailing at night; p <0,001). It was revealed that in adolescents with hypertension, as the body weight increases, myocardium is restructured with the involvement of the left and right heart ventricles and left atrium, with the development of myocardial hypertrophy (eccentric, concentric remodeling). Indicators of endothelial dysfunction showed that the gain of brachial artery diameter was below 10% in 41,0% adolescents 1st group, in 48,6% patients 2nd group, and in 70,0% patients with obesity (p<0,01). We found that the average of endothelin-I was significantly higher in adolescents with obesity 0,95±0,12 pmol/l compared with healthy peers 0,69±0,03 (p<0,001). Values of interleukin-6 and TNF-α in adolescents with hypertension in the presence of overweight and obesity were higher as compared with the control group, but did not reach the level of reliability and showed no significant difference depending on the body weight. CRP indicators in adolescents with hypertension increased significantly from the group with normal body weight 1,26±0,22 mg/l to the group with excess weight (2,73±0,66; p<0,01) and obesity (7,45±1,62; p<0,001). The level of MAU was significantly higher in adolescents with normal body weight compared with obese peers (33,59±4,53 versus 24,464,13 mg\l; p<0,01).

Conclusion: Consequently, in adolescents with AH and overweight, but especially in those with obesity, we found an increase in the level of the most powerful factor vasoconstriction - endothelin-1, as well as systemic factors of subclinical inflammation CRP. This fact determines the formation of endothelial dysfunction in this category of adolescents, promoting stabilization and progression of the AH with development of maladaptive myocardial remodeling (hypertrophy).

ID: 253

Cannabis Use During Adolescence: An Overview in Luxembourg and in Comparison to Other European Countries

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Introduction: Cannabis is the most widely consumed illegal drug worldwide. The use of cannabis is a risk factor for mental illnesses, but also for social problems such as lower educational attainment and the use of other drugs. Consumption is considered particularly harmful if it starts early in adolescence, if in a high-dose and if it continues on a regular basis.

Purpose: This study aims to give an overview on adolescents' cannabis consumption in Luxembourg (how often and when they started consuming cannabis) and in comparison with other European countries.

Materials and Methods: In 2014, 3461 students in secondary school took part in the HBSC study. The questionnaire translated to both French and German. They answered, among other health related questions, about their cannabis use (30 days and lifetime prevalence), as well as when they started consuming it.

Results: Two groups were formed: 15-16 and 17-18 years old. In the 15-16 group, 11.2% used cannabis in the past 30 days and 21.7% tried it at least once in their lives. In the age group of 17-18, 15.2% started using it in the last month and 38% in lifetime. Regarding the use in the past 30 days split by gender, the prevalence for girls is 8.9% and 13.8% for boys (15-16 age group) and 10.6% and 20.1% respectively (17-18 year-olds). The lifetime prevalence for 15-16 years old is 18% for both girls and boys, higher than the 13% HBSC participant countries (mostly

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European) mean for girls and 17% for boys. Finally, about the age they first tried cannabis, 6.8% of boys and 5.3% of girls responded the age of 12 (or younger), a similar ascendant curve is found and the prevalence of 25% for boys is reached at the age of 14 years, as for girls it is at 14.2 years old.

Conclusion: First, our results highlight the differences between the 30-day versus lifetime consumption, indicating the latter is much more widespread than the regular consumption. Secondly, the older the students are, the higher the proportion of cannabis users, for both boys and girls, with regular consumption being more frequent among boys. In addition, consumption in a lifetime in Luxembourg is higher than other Europeans countries. Finally, a quarter of consumers started at the age of 14 or younger. This data indicates not only that prevention programs still are in need, but they should start early.

ID: 267

Communication with Father and Psychosomatic Complaints among Adolescents: Results from Armenian Health Behaviour in School-aged Children (HBSC) 2013/2014 Survey.

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Introduction: Communication with parents is an essential component of parent-child relationships and strong determinant of health and well-being among adolescents. Ease of communication with father is associated with emotional well-being, self-esteem, reduced engagement with health compromising behavior especially for girls. Psychosomatic health complaints may result in injures, suicide, mental health problems.

Purpose: The aim of the study was to explore the association between some psychosomatic complaints and communication difficulties with father in Armenian adolescents.

Materials and Methods: The analyses was based on data from the Armenian HBSC cross-sectional study conducted in 2013/2014 with representative sample consisted of 3679 pupils among 11-15 years old (mean age= 13,2+ 1,6 y., 48% of boys, 52% of girls) and 1436 pupils of 17-years old (40% of boys, 60% of girls). According to HBSC methodology standardized anonymous questionnaires were used.

Results: About 35.5% of boys and 46.6% of girls aged 11-15 who had difficulties in communication with father reported feeling low more than once a week. Feeling nervous more than once week were reported by 17.2% of boys and 46.6% of girls who recognized their communications with father as difficult. Analyzes showed that psychosomatic complaints and ease of communication are worsening with the age. Among 17-year- old students who found communication with father as difficult 62% of girls and 47% of boys feel low and 50% of girls and 36% of boys feel nervous more than once a week. Good communication with father correlates with low rate of psychosomatic complaints especially among girls: only 16% of boys and 20% of girls who reported ease of communication with father feeling nervous more than once a week

Conclusion: Survey data indicates to an essential and significant correlation between communication with father and psychosomatic health and well-being among Armenian adolescents.Boys and girls who better communicate with father are more likely to report low psychosomatic complaints than those with difficult communication with fathers.Gender related differences are significant both for good and bad communication. Further strategies should be targeted to improving parenting and communication skills among fathers and emphasizing their role in supporting health and well-being of their sons and especially daughters.

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Negative Health Consequences of Social Media Abuse in the Context of the Quality of Social Relations

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Introduction: Every day contact with social media could result in mixed potentials and effects for adolescent well-being and their relation with family and peers.

Purpose: The aim of the paper is to evaluate the association between problematic social media use and adolescent well-being, taking into account socioeconomic and demographic factors and relation with significant persons.

Material and Methods: A nationally representative sample of 5225 school children (mean age=13.59±1.66) were collected within the 2018 Health Behavior in School-aged Children (HBSC) study conducted in Poland. The WHO-5 index was considered as a main outcome variable. It consist of 5 items rated on 6-point Likert scale (range 0-25) and refers to positive mood, vitality and general meaning of life. Social connectedness was measured using the Multidimensional Scale of Perceived Social Support (MSPSS). The scale is comprised of a total of 12 items, with 4 items for each subscale relating to family, peers and significant others. Only first two dimension of MSPSS were included in the HBSC protocol, both ranged 0-24. Social media addiction symptoms was measured with the nine-item Social Media Disorder Scale (SMD-scale), using a dichotomous (No/Yes) responses. The 6-item Family Affluence Scale (FAS) was used to assess socioeconomic disparities. Series of multivariate linear regression models were estimated.

Results: The overall well-being WHO-5 index was 13.82 ±5.47. Two-thirds of students reported at least one symptom of excessive social media use (on average 1.95 symptoms ± 2.16). Girls reported lower well-being and more symptoms of the Internet addiction than boys. Adolescents with many symptoms of the Internet addiction achieved much lower WHO-5 index than those without such problems, 11.14±5.44 vs. 15.15±5.39 in marginal categories, respectively. Problematic social media use had a greater negative impact on family relationships than on relationships with peers. In the multivariate linear regression model five factors under study (age, gender, family support, peers support, social media use) but not FAS, explained 27.8% variability of the WHO-5 index. Family support was found as the main predictor of WHO-5. On the contrary, 21.9% of variability in family support index was explained by age, gender, peer support, social media abuse and FAS.

Conclusion: Excessive social media use represents a serious risk to adolescent health and their social bonds. More complex mechanisms of this association should be the subject of further research.

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ID: 191

Prevalence and Association of Depressive Symptoms with the Consumption of Analgesics among Adolescents

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Introduction: Depression is a major cause of morbidity and disability worldwide, and according to the World Health Organization, it is the fourth leading cause of disease burden. Depression is a complex condition that can have disabling effects on an individual's personal relationships, productivity, and general health. A large group of youths are at risk for depression, which is more pervasive than normal teenage mood swings. The worldwide prevalence rate of depression among adolescents is approximately 4–8%. Depressive symptoms have a significant association with how physiological pain is perceived. In Sweden, non-prescribed over-the-counter (OTC) drugs have seen permitted since 2009. Therefore, analgesics like paracetamol and ibuprofen are available from retail shops for all customers, including adolescents. Studies on the use of OTC drugs in Sweden have revealed how Swedish teenagers can be vulnerable as new customers due to gaps in knowledge and misconceptions about OTC drugs.

Purpose: The aim of this study is to investigate the prevalence of depressive symptoms, physiological pain, and the consumption of analgesics, as well as the association between depressive symptoms and the consumption of analgesics among Swedish adolescents between 13 and 15 years old. The hypothesis of this study is that there is a correlation between depressive symptoms and analgesic intake among Swedish adolescents.

Materials and Methods: This study was conducted in six municipalities in southern Sweden from 2012 to 2014. All schools with students in grade 8 were asked to participate in the study, and 21 of the 23 eligible schools agreed to participate. Questionnaires were distributed among the students, and consent responses were obtained. Depressive symptoms was measured by the Center for Epidemiological Studies Depression Scale (CES-D), scores ≥ 16.

Results: The prevalence of depressive symptoms was 37% among girls and 13% among boys. The prevalence rate of consuming analgesics during the last weeks was 57% among girls, and 29% among boys. A multivariate logistic regression showed that depressive symptoms are significantly associated with the consumption of analgesics among teenagers.

Conclusion: This paper could contribute to the wider research scope in the global community in terms of how increasing use of OTC analgesics among adolescents might be a sign that the health care system should focus on their complex psychosocial problems. Further research should be done on what to target when supporting adolescents who are struggling with pain and higher consumption of analgesics to educate them about pain-management strategies.

ID: 165

Prevalence of Overweight and Obesity in Healthy Bulgarian Children and its Impact on Lung Function Parameters

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Introduction: The main determinants of lung functions are gender, age, height and weight and they contribute to calculating the predicted normal values. The complex assessment of respiratory functions among healthy children includes comprehensive measurements of anthropometric parameters. There is increasing evidence on the effect of obesity on lung function in children with and without respiratory diseases.

Purpose: The aim of the present study was to evaluate the prevalence of overweight and obesity among healthy children and its impact on lung function parameters.

Materials and Methods: Six hundred and seventy-one healthy Bulgarian school children (339 males) in the age span 7 – 18 years took part in the study. All participants completed anthropometric measurements – standing height, weight and BMI. Studied group underwent comprehensive pulmonary function assessment – (MasterScreen Diffusion, Jaeger, Wuerzburg, Germany) in a certified laboratory applying the ATS and ERS criteria to ensure quality.

Results: We used Cole (2000) reference values to evaluate the prevalence of overweight and obesity. The overweight and obese children group consisted 131: overweight - 97 and obese – 34, so that was 19.5% or every fifth child. The highest prevalence of overweight was at the age of 10, 11, 12 and 17 and obesity – respectively at 7, 10 and 14 years. We compared children with normal weight and overweight and obesity in every age group and found that the increase in weight is combined with height growth and the same increase in lung function parameters – FVC, FEV1, PEF, and FEF50. As an example at the age of 10, children with normal weight had a mean height of 142.1±6.6, vs. 147.8±6.1($p<0.05$) in overweight and 151.6±11.1($p<0.05$) in obese children. The same pattern was found in FEV1(L): children with normal weight had mean value 2.16±0.31, vs. 2.37±0.28($p<0.05$) in overweight and 2.71±0.54($p<0.05$) in obese children. In order to overcome the effect of height we compared the normal weight and overweight and obese children in height groups and found nonsignificant differences for the spirometric indices. Only in the group 130-139 cm, the obese children had lower values - FEV1(L): 1.78±0. 13 vs. 1.91±0.19 (NS) in children with normal weight.

Conclusions: The prevalence of overweight and obesity in healthy Bulgarian children was 19.5%. The increase of weight is combined with height growth and same pattern in the mean spirometry indices. Lower values were found only in obese 7 years old children.

ID: 245

Social Media Use and Physical Appearance Social Comparison and Their Relation with Body Image in Adolescence.

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Introduction: Social comparison theory has been increasingly used in cases to understand the processes through which societal messages about appearance influence adolescents' body image. Along with the rapid development of new technologies, social media is becoming an

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extremely important media channel influencing the various spheres of teenagers' lives. Research suggests that the use of social media can negatively affect the body image of teenagers through the social comparisons of appearance and internalization of body standards.

Purpose: The main purpose of the study was to show how social media use and physical appearance social comparison affects body image of adolescents.

Materials and Methods: Data from the Polish Health Behaviour in School-aged Children (HBSC) 2017/18 survey for students aged 13-15 years (14.57±1.05) were used. The sample totaled 3,501 participants (48.3% boys). An exploratory factor analysis was conducted along with an analysis of scale reliability using Cronbach's alpha to evaluate psychometric properties of the Physical Appearance Comparison Scale (PACS), Social Media Disorder Scale (SMD) and Body Image Scale (BIS). Differences in PACS, SMD and BIS scores according age groups and gender were checked. Linear regression models adjusted on age and gender were estimated with BIS as a dependent variable. Simple path model was estimated and Sobel's mediation test was used. The data was analysed using IBM SPSS v.21 (PS Imago).

Results: SMU was higher in the 13 than 15 year-olds. PACS scores were significantly higher in the older age group. The younger group had significantly better body image. Girls were more likely to show worse body image and presented higher mean score of SMU and boys made social comparisons of appearance to a lesser extent than girls. The model adjusted on gender explained 21,6% of BIS variability and showed that SMD as well as PACS significantly lower BIS among studied adolescents. Partial mediation of the PACS in relation with SMD and BIS was investigated, confirmed by Sobel's test, $Z=-15.27$, $p<0.001$.

Conclusion: Social media use and body social comparison influences the body image dissatisfaction in adolescence.

ID: 242

Stress as a Mediator of The Relationship Between Physical Activity and the Subjective Complaints in Adolescence

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Introduction: Nowadays, every age group experiences stress. It has an impact on our well-being and health. Adolescents are particularly vulnerable to stress which is associated with their entering into adulthood and the changes that affect their health and social bonds.

Purpose: The aims of this study were to assess the mechanism of relationship between physcial activity, stress and subjective complaints.

Material and Methods: The research was a carried out in 2018 as last round of the HBSC (Health Behaviour in School Aged Children) in Poland. Questions about stress were asked to 3498 students aged 13 and 15. Cohen stress scale were used in the questionnaire. The main dependent variable was the scale of eight subjective complaints (SCL – subjective complaints checklist). Independent variables were the sex, age, family affluence – determined by FAS scale and moderate-to-vigorous physical activity of young people - MVPA.

Results: In a simple correlation analysis attention should be paid to strong relationship between stress and subjective complaints. MVPA is more strongly correlated with stress than with SCL. In more affluent families adolescents are more physically active and there are less stressed.

In the multivariate linear regression model, adjusted for age, sex and FAS - MVPA remains an important predictor of SCL ($p = 0.001$). If we include stress in the analysis, the impact of MVPA becomes irrelevant ($p = 0.359$). But if stress is considered as dependent variable MVPA becomes important. Mediation effect was confirmed by Sobel test.

Conclusion: When analyzing the relationship between physical activity -PA- and subjective health of school children it is worth to consider intermediate relationships. PA can act indirectly by reducing stress.

ID: 265

Three Cases of Hypokalemic Periodic Paralysis

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Introduction: Hypokalemic periodic paralysis (HPP) is a group of muscular diseases and the diagnosis is based in the consensus diagnostic criteria: a history of recurrent attacks of muscle weakness associated with documented serum potassium <3.5 mmol/L during attacks and/or the identification of a heterozygous pathogenic variant in CACNA1S or SCN4A gene. Approximately 30% do not have a pathogenic variant identified in either of these known genes.

Case Report: The first case is a 17-year-old boy, previously healthy, admitted to the emergency department with generalized and intense myalgias and weakness after a football practice. No history of previous episodes, recent infections or medications. He was pale and had generalized weakness with paralysis of lower limbs. Laboratory results were normal except for a potassium 1.7 mEq/L. The electrocardiogram (EKG) presented U waves and flattening of T wave. He improved symptomatically and normalized EKG after intravenous potassium. He was discharged with potassium supplements, nutritional counseling and restriction of intense physical activity. Seven weeks after he had a second episode during a respiratory infection. His family history revealed similar episodes in three maternal relatives. On genetic test, we found the mutation c1583G>A at exon 11 of the CACNA1S gene. Recently, his 13-year-old sister had her first episode of marked asthenia and weakness after a long walk the day before. She presented with tetraparesis. Her serum potassium was 1,7 mEq/L. The EKG presented a prolonged QT interval, U waves in DII and flattening of T wave. She improved clinically after intravenous and oral potassium supplements. The third case is a healthy 11-year-old with four episodes of generalized and transitory muscular weakness after physical exercise. In one of them, he displayed extreme fatigue, generalized muscular weakness in four limbs, dizziness and dyspnea. He had no family history of periodic paralysis. He had a normal creatine kinase and thyroid function. He had mild hypokalaemia (3,2 mEq/L). The exercise stress test affected predominantly the lower limbs, with motor deficit and inability to walk. The findings during the electromyogram test could translate an ion channel dysfunction in the context of periodic paralysis. The genetic tests so far were all negative.

Conclusion: We present three different cases of HPP, with and without family history, with and without the identification of a pathogenic variant, showing the heterogeneity of this condition and the challenges that the clinician was to deal with, regarding diagnosis and treatment.

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A Rare Cause of Upper Gastrointestinal Tract Obstruction in a Patient with Marfanoid Phenotype

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Introduction: Superior mesenteric artery syndrome (Wilkie Syndrome, aortomesenteric clamp) is a rare cause of upper gastrointestinal tract obstruction. So far there are about 400 cases reported in the literature.

Purpose: The purpose of this case report is to highlight the importance of a rigorous differential diagnosis in a pediatric patient with recurrent vomiting.

Materials and Methods: We present the case of a 17-year-old adolescent, admitted in the Pediatrics Department of "Grigore Alexandrescu" Hospital in July 2018 for recurrent episodes of vomiting associated with epigastric pain.

Results: (Case Description): The patient started presenting abdominal pain five years before, apparently after an appendectomy. In the last year, he associated heartburn, dysgeusia, recurrent food vomiting and postprandial plenitude. A diagnosis of H. Pylori acute gastritis was initially set and he received triple therapy with temporary relief. Later on, gastroesophageal reflux disease and esophageal motility disorders were taken into account for the differential diagnosis. Due to chronic digestive symptoms, the adolescent presents anxiety related to food intake with extremely reduced appetite, food selectivity and lack of weight gain. The clinical examination reveals marfanoid phenotype, ligamentous hyperlaxity, low weight, chest deformity, excavated abdomen, painful in the epigastrum and clapotage. Laboratory investigations are within normal limits. Esogastroduodenal barium examination shows an important gastric stasis with an elongated stomach, its inferior pole located distally to the iliac crest, dilation of the second part of the duodenum with delayed distal passage. Abdominal ultrasound reveals reduced aortomesenteric distance at the third part of the duodenum. Upper gastrointestinal endoscopy shows barium residue in the stomach 24 hours after the contrast study was performed, important gastric stasis and a spastic pylorus which does not allow the passage of the endoscopy tube in the duodenum. Abdominal computed tomography confirms the obstruction by vascular compression of the third part of the duodenum at the aortomesenteric angle, a specific image for superior mesenteric artery syndrome. Surgical treatment is recommended, but the parents refuse.

Conclusion: Although a rare entity, duodenal obstruction by aorto-mesenteric clamp must be taken into account in the differential diagnosis of recurrent vomiting. An early radiologic diagnostic spares the patient of chronic digestive disease with negative impact on nutritional status and quality of life.

ID: 214

A Rare Clinical Feature of Henoch Schonlein Purpura (HSP)

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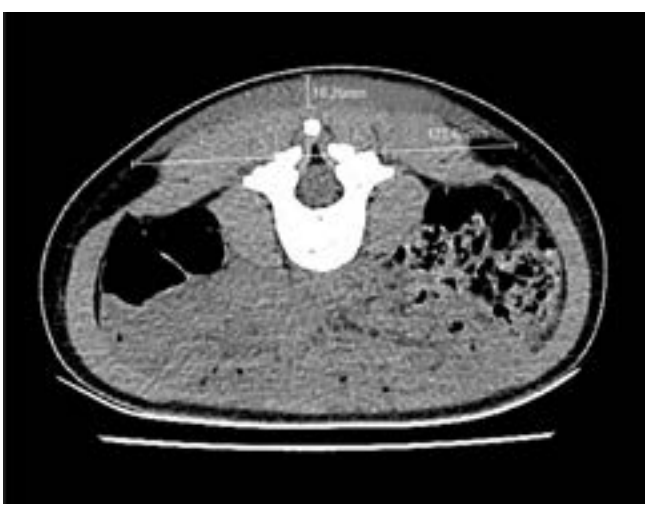
Introduction: Henoch Schonlein Purpura (HSP) is a common systemic vasculitis in children. The annual incidence is 6-20 cases per 100000 in the UK. It often follows a short mild febrile illness and is triggered by infections, vaccinations or environmental exposures. It commonly causes a macular rash that evolves into symmetrical purpuric lesions over lower limbs, buttocks and ulnar surface of the arms. It can cause joint pain and swelling, particularly in the knee and ankle joints, along with colicky abdominal pain, bloody diarrhoea and kidney involvement.

Purpose: To present the rare feature of a lumbar subcutaneous swelling in a case of Henoch Schonlein Purpura.



Case Description: A 4 year old girl presented to the paediatric assessment unit with left ankle swelling and purpura over her ankles. She was observed and felt to have evolving HSP. Her blood pressure was within normal limits for her age and height and there was no proteinuria. She was noted to have microcytic anaemia following an Full Blood Count and was commenced on iron supplementation. She was discharged with follow up arranged to monitor blood pressure, urinalysis as per local guidelines and repeat a full blood count in 3 months time. She re-presented the following day with a subcutaneous swelling over the lumbar region of her back. The rest of her systemic examination was normal. A CT scan showed a well-defined paraspinal subcutaneous fluid collection 12cmx1cmx12cm superficial to the spinous process. She was discharged and followed up by her GP who noted complete resolution of the swelling within 7 days. She had no further complications.

Results: We have presented a case of a rare finding of a lumbar-sacral swelling associated with HSP.

Conclusion: HSP is a common paediatric presentation and can have systemic complications to include kidneys, joints and cutaneous involvement with facial, scalp, peno-scrotal and labial oedema. This is however only the 3rd case found within the literature of lumbar-sacral swelling and oedema associated with HSP. Schaefer et al presented the first case in a 5 year old boy whose lumbar-sacral swelling occurred prior to the development of the typical purpuric rash. Duman et al presented the second case of a 4 year old boy who developed a lumbar-sacral swelling 3 days after the development of the rash. This case demonstrates an uncommonly reported feature of HSP and highlights the possible atypical nature with which it could present.

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ID: 210

An Atypical Presentation of Spontaneous Pneumomediastinum

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Introduction: Primary spontaneous pneumomediastinum (SPM) is defined as air in the mediastinum of unknown cause. SPM is a rare clinical entity, even more so in pediatric patients, occasionally associated with pneumothorax, pneumopericardium or, rarely, pneumorrhachis. Many pathological and physiological events can cause SPM, such as repetitive Valsalva maneuvers, asthma, foreign body ingestion and/or aspiration, esophageal perforation, inhalation of illicit drugs, among others. Its association with bronchopulmonary infection by Mycoplasma pneumoniae and respiratory syncytial virus is also well established. Diagnosis can be confirmed by chest radiography. Clinical presentation usually includes acute chest pain and dyspnea, although symptoms such as neck pain, dysphonia or dysphagia may also occur. SPM is a benign and self-limiting condition, with only supportive care needed. Hospitalization is considered because of the risk for complications (such as hypertensive pneumomediastinum and pneumothorax).

Case Report: A previously healthy 9-year-old girl went to the emergency department (ED) after 3 days of productive cough, low grade fever and sore throat. On clinical examination, palpable subcutaneous crackles, crepitus and anterior cervical pain suggested subcutaneous emphysema, without respiratory distress and with normal respiratory sounds on auscultation. Chest radiography revealed subcutaneous emphysema, retropharyngeal air-trapping and extraluminal air in the mediastinum. Diagnosis was confirmed by computerized tomography, which also showed signs of pneumorrhachis. She was admitted under supportive care (oxygen, bed rest and analgesics) with good clinical evolution. There was no recurrence during follow-up. Assessment of precipitating events excluded most frequent etiologies.

Conclusion: Clinical signs of subcutaneous emphysema require radiological investigation to evaluate its extension and the location of the air source, and as differential diagnosis, one must always consider SPM. This case highlights a rare disease at this age, with an uncommon presentation and without a known trigger event.

ID: 224

Assessing Implementation of the ISBAR3 Clinical Handover Tool in an Irish Tertiary Paediatric Hospital : Student Perspective

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Introduction: Effective communication between clinicians is critical to the functioning of a successful and safe health care system. The comprehensive, safe, and efficient transfer of patient information from one healthcare professional to another is crucial to ensure patient wellbeing and to minimise adverse events. The ISBAR3 is a structured clinical handover template. ISBAR3 provides a simple and effective framework in which to plan and structure communication that can significantly improve patient outcomes.

Aims: 1. To raise awareness of the usage of ISBAR3 as a tool of communication among medical staff. 2. To evaluate the use of ISBAR3 in clinical handover in a tertiary children's hospital. 3. To raise awareness of the usage of ISBAR3 as a tool of communication among medical students.

Methods: All relevant staff are informed of and educated on the ISBAR3 framework on clinical handover. Over a period of five weeks, a team of fourth year medical students attended the morning handover meeting, observed and collected data on the implementation of ISBAR3. Points were assigned to each component of the ISBAR3 framework that was implemented. This data was entered into a clinical audit data excel template for analysis. The handovers included all medical admissions that presented through the Accident and Emergency Department. Intensive Care Unit admissions and patients transferred from other clinical centres were omitted from the dataset. The data set was completely anonymised.

Results: During the 5 week period, there were a total of 39 medical admission clinical handovers. There was only one case that had a perfect handover and touched on all aspects – Epilepsy. All other cases had flaws. The top 3 components implemented were Identification (Name & Age) and Situation (Presenting Complaint); scoring 97%, 89% and 97 %, respectively. The 3 commonly omitted aspects were within Risk (Infection Control, Child Protection and Safety for Discharge), scoring 7.6%, 10.2% and 7.7%, respectively.

Conclusion: While the impact these findings have on patient care cannot be directly evaluated, it is evident that the ISBAR3 tool is not being used as standard procedure at our centre. This identifies an area of clinical practice with room for improvement. A re-audit is planned following dissemination of information to complete the audit cycle.

ID: 143

Care Burden for Adolescent Whose Family Members Need Palliative Care: Nursing Students' Opinion

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Aim: Palliative care patients need assistance and support of the caregiver in many areas, such as their daily lives, medicines etc, and sometimes caregiver can be children. This study aimed to evaluate nursing students' opinions on care burden of adolescent.

Method: This study was carried out with total 106 last year nursing students in a university, who chose palliative care in spring term in 2017-2018. The study aimed to determine nursing students' opinion on burden care of adolescent care giver. First an education about burden care of palliative care was given to students and after it video was played. Video was about a family that mother, grandmother and younger brother needed palliative care. Father was working all the time to support family expenses. And a teenage boy had to take care of all his family members needs. Video was translated Turkish simultaneously. After watching it, students discussed the burden care for him and made a common decision report.

Findings: "Unhappiness, insomnia, feeling alone, tiredness, failure at school" determined as subjective aspect of burden care. "Time is not enough for anything, money problems" were determined as objective aspects of burden care. They also expressed negative reaction for burden care (such as future is black, I do not want to have a family etc) or positive reaction for burden care (such as I am a strong boy so I can do anything etc).

Conclusion: Burden care can affect children's lives, whose family members are palliative care patients, in different ways.

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ID: 256

Cogan´s Syndrome – A Case Report

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Introduction: Cogan's syndrome is a chronic inflammatory disorder that most commonly affects young adults of both sexes, with a mean age of 30 years. There are a few cases reported in children starting from 4 years old. The pathogenesis is unknown, but is probably the results of an autoimmune mechanism. Clinical hallmarks are interstitial keratitis and vestibulo auditory dysfunction, and associations between Cogan's syndrome and systemic vasculitis, as well as aortitis, also exist. The interstitial keratitis typically causes eye redness, pain, photophobia, and blurred vision. The inner ear manifestations consisting of vertigo, ataxia, nausea, vomiting, tinnitus, and hearing loss. The diagnosis of Cogan's syndrome is mainly clinical and based upon characteristic involvement of both the eye and the inner ear. The differential diagnosis includes sarcoidosis, polyarteritis nodosa, granulomatosis with polyangiitis, and rheumatoid arthritis. Other diagnostic possibilities include the infectious causes of interstitial keratitis and subacute encephalopathy syndrome. Medical treatment of Cogan's syndrome depends on how extensive the disease is at the time of diagnosis. In cases with only mild eye involvement, the treatment is the application of topical glucocorticoids. When there is evidence of an inner ear pathology, a severe infection of the eye or systemic vasculitis, immunosuppressive therapy is used. The first choice is glucocorticoids.

Case Report: We describe a case of a 17 year old boy, with a history of juvenile myoclonic epilepsy (single episode). He went to the emergency department for fever, oral thrush and odynophagia, which were associated with increased inflammatory markers, anemia, lymphopenia and hepatosplenomegaly. The etiologic study conducted on that date was inconclusive, and it was referenced for general pediatric consultation to pursue study. Three months later, tinnitus and severe neurosensory hearing loss was added to the previous condition and one month later a bilateral red eye was added. Ophthalmologic examination referred to red eye without uveitis. Otologic examination established the presence of hearing loss, and started treatment with oral corticosteroids. He completed a etiological study and faced the most probable diagnosis of Cogan's syndrome with central involvement and severe hearing loss, being treated with methylprednisolone. Currently being treated with prednisolone, esomeprazole, supplemental calcium and vitamin D. It has presented good response to corticotherapy, with progressive improvement of hearing loss, without new episodes of red eye.

Conclusion: Cogan's syndrome is an infrequent disease. Corticosteroids are the first line of treatment, and they can aid in the recovery of hearing if given early in the disease course.Patients without systemics disease generally have a good prognosis. Therefore, early assessment and treatment for systemic inflammation are needed to prevent life threatening complications.

ID: 195

Down's Syndrome: Follow Up in a Portuguese Hospital

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Introduction: Down syndrome is the most common cause of intellectual disability worldwide. This syndrome is caused by a genetic abnormality – triplication of chromosome 21. It occurs in about one per 1000 babies born each year and involves numerous physical features and comorbidities. Among these, congenital heart defects, blood and immune system disorders, atlantoaxial instability, and others, are known to be frequent and can be associated with a worse outcome.

Purpose: To acknowledge the characteristics and needs of the children with Down syndrome with follow up in a tertiary referral hospital and establish an adjusted protocol.

Material and Methods: Retrospective study of the medical records of 128 children with Down syndrome diagnosis, who had multidisciplinary follow up, from January 2007 through December 2017.

Results: Our sample included 128 children with Down syndrome (51% were male; median age was 10 years). 97% (n=124) of these children had at least one complication associated with the syndrome. Congenital heart disease occurred in 69,5% (n=89). Half (n=64) had otorrinolaringologic comorbidities. Ophthalmological complications were present in 47,7% (n=61). Gastroenterologic (24,2%), endocrine (23,4%) and orthopedic (25%) problems also affect a significant group of children. Due to these comorbidities, 77% (n=99) had one or more surgeries during the last 10 years and up to 40,6% were submitted to at least one cardiac intervention. Smaller percentages were found for otorrinolaringologic (32%), ophthalmological (7,8%) and orthopedic (4,7%) surgeries. If we consider exclusively the children with cardiac defects, more than half (58,4%) required one or more cardiac surgeries. A higher percentage of surgical intervention (61%) was found in the group of children with an otorrinolaringologic compilation. The vast majority of the children (86%) had at least one hospitalization, with the number being as high as 22 hospitalizations in one of the cases.

Conclusion: As medicine evolves, the follow up of children with Down syndrome is improving, which manifests through better development and clinical outcomes as well as an improvement in their life expectancy. Their health management requires an organized approach with regular evaluation and monitoring for associated abnormalities and prevention of common disorders. We have established recommendations for medical evaluation in our hospital and hope to improve our methods as we learn more about these children profile.

ID: 176

Esophageal Stenosis in a Child Caused by Cytomegalovirus Infection

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Introduction: The article describes an non typical clinical case of cytomegalovirus infection in a child suffering esophageal stenosis, manifested by unusual localization of cell transformation in the form of multilayered squamous esophagus epithelium lesion, that allowed to determined diagnosis with plucked biopsy. Child B, girl, 1 year 5 months old.

POSTER PRESENTATIONS: POSTER VIEWING 1

Complaints on Admission: Vomiting, dysphagic phenomena, impaired food passability. Anamnesis: birth weight 1500 g, up to 1.5 month feeding through the probe because of morphofunctional immaturity of the internal organs and prematurity. Later the child was transferred for "per os" feeding, which was digested according to the age norm. At the age of 11 months the regurgitation after each meal has occurred, the composition of which corresponded to undigested food. Regurgitation was preceded by coughing, with the increase of the distant oral crepitus. For the last 2-3 months, the baby was fed by small portions. The child's condition was complicated by bilateral pneumonia, which was repeatedly treated by antibacterial therapy.

Results: Results of esophagogastroduodenoscopy (EGDS): esophagus passable, widened in diameter. Mucous pale, with the false pockets. There was a stenosis at the level of the distal part (possibly the cardia) up to 1.0-1.5 mm, making impossible for the endoscope to pass. Conclusion: cicatricial stenosis of cardiac, decompensated form. Histological study: esophagus mucosa biopsy was presented by a fragment of a multilayer squamous non-keratinizing epithelium with lymphocytic and plasmacytic infiltration. Also the transformation of squamous non-keratinizing epithelium was noted: cells were enlarged, there was a light rim ("owl eye") in the perinuclear area. The cytoplasm of these cells was unevenly mesh.

Conclusion: Cytomegalovirus esophagitis. PCR (blood): CMV-positive, PCR (urine): CMV - positive, PCR (saliva): CMV - positive. Thus, this clinical case revealed activation of CMV esophagitis as a result of decreased immune protection, that have been evidenced by the results of immune status investigation. The entrance gate to the virus could be the upper segments of the respiratory and digestive tract. Most obvious that newborn prematurity and morphological immaturity of the internal organs appeared to be risk factors in the development of the disease. It is not excluded that case of pneumonia in the anamnesis was also the result of CMV infection. The presented clinical case is interesting by unusual localization of cell transformation, particularly lesion of multilayered squamous epithelium of the esophagus, which allowed to establish the diagnosis in a pinch biopsy. So, as the conclusion, it is necessary to keep in the mind, that cases of esophageal stenosis in children may occur as possible complications of CMV-esophagitis.

ID: 142

Fathers' Infant Attachment Status and Related Factors

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Selcuk University, Turkey

Background and Aims: Attachment is a strong and emotional attachment to the person associated with the birth of the infant. This study was planned to determine the status of paternal infant attachment and the factors that affect the attachment of 6-12 month old infant to a family health center.

Methods: The study was conducted with 179 fathers, who were children between 6 and 12 months, who were referred to a public hospital child polyclinic. Data were collected from March-June 2017 using the "Personal Information Form" and the "Paternal Infant Attachment Scale". The data are presented as number, percentages, mean, and standard deviation, and the groups were compared using the Student's t, Anova (F), Mann-Whitney U, and Kruskal-Wallis tests ($p<0.05$).

Results: The "Paternal Infant Attachment Scale" (PİAS) levels of the fathers participating in the study are 84.67 ± 9.00. According to the parents who had two or more children of the father who had a child in the study, the score of PİAS was higher than that of the parents who received university education ($p<0.05$). According to the parents whose monthly income was middle-earner's BBBÖ score was low and their father's relationship with their father was good, the father's score was found to be statistically significantly higher than that of the father ($p<0.05$). There was no significant relationship between father's gender and age, father's age and occupation, father's first marriage, family type and father's PIAS score ($p<0.05$).

Conclusions: As a result of the study, it was seen that the number of children, education and income status, and the level of father relationship were related to paternal infant attachment.

ID: 266

Group B Streptococcus Parotitis in Little Infant

Soares, Joana Margarida Coelho; Pimenta, Sofia; Leite, Ana Margarida; Machado, Ângela; Brandão, Carla; Monteiro, Cláudia; Cunha, Joaquim
Centro Hospitalar do Tâmega e Sousa, Portugal

Introduction: Acute bacterial parotitis is mainly caused by Staphylococcus aureus. It is rare in neonates and infants without identified risk factors. It is even more rare when the cause is group b Streptococcus (GBS). The diagnosis, is essentially clinical, with parotid swelling associated with local inflammatory signs and outflow of pus through the Stensen's duct. This latter is the pathognomonic sign of this pathology. Sometimes systemic signs are presentation such as fever, irritability and refusal to eat. Ultrasound scans not only corroborates the previous diagnosis, but it also excludes local complications. The treatment consists of an initial phase of large spectrum empirical endovenous antibiotic and subsequent therapeutic adjustment for the identified microorganism. Surgical intervention is rarely need.

Case Description: 36 days, female, observed in the emergency due to fever and irritability with 5 hours of evolution. In physical examination observed painful swelling with flushing of parotid region. Perinatal antecedents include gestation without intercurrences, positive GBS screening with complete prophylaxis, eutocic delivery at 37 weeks and 5 days, birth weight of 2280g. Complementary diagnostic: leucocytes 4900/ul, elevation of C-reactive protein 53 mg/L, normal amylase and ultrasound suggestive of parotitis. He initiated intravenous antibiotic therapy (Ceftriaxone + Flucloxacillin) after collection of blood culture and exudate of the Stensen's duct. Isolated SGB in Stensen's duct exudate, suspended Flucloxacillin and complete 10 days of Ceftriaxone. Observed in ambulatory at 5 months with normal physical examination and without new episodes of parotitis.

Conclusion: GBS is an important cause of infection in neonates and small infants with a high mortality and morbidity rate. Since the implementation of GBS prophylaxis the incidence of early infection by GBS has declined dramatically. However, the incidence of late infection, between the eighth and the ninetieth day, remained stable, which fully strengthens the various transmission paths. Although most times, the late GBS infection occurs as bacteraemia, it can also manifest as a localized infection, such as parotitis. In conclusion, with this clinical case, the authors seek to demonstrate a rare form of late GBS infection.

POSTER PRESENTATIONS: POSTER VIEWING 1

ID: 109

Assessment of the Nutritional Status of Primary School Children in Fako Division, South West Region, Cameroon.

Hildegarde, Nvonako Tsasse[1]; Koki, Paul[2]; Mbuagbaw, Lawrence[3]
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Introduction: According to the World Health Organisation (WHO), in 2011 about 101 million children under the age of five were underweight (low weight for age), 165 million children were stunted (low height for age), and approximately 52 million were wasted (low weight for height). But little information exists on the nutritional status of primary school children in Cameroon according to the Demographic and Health Surveys of 2001, 2004, 2007 and 2011.

Purpose: This study was carried out to determine the prevalence of under and overnutrition among children aged 5 to 11 years attending both private and public primary schools in Fako Division, South West region of Cameroon.

Materials and Methods: This was a community-based cross-sectional study, involving 961 randomly selected school age children from 10 primary schools in the Fako Division. Height and weight were measured. Anthropometric indices namely, weight for age, height for age and weight for height were used to assess children's nutritional status. The Centers for Disease Control and Prevention (CDC) 2000 Z scores and percentiles were computed for anthropometric indices and Body Mass Index (BMI) respectively.

Results: The overall prevalence of under nutrition obtained was 16.9%, while the prevalence of underweight, stunting and wasting was 4.4%, 11.4% and 1.4% respectively. The overall prevalence of over nutrition obtained was 38.8%, while the prevalence of overweight and obesity was 24.0% and 14.8% respectively.

Conclusion: Over nutrition in primary school children is rising at a more alarming rate as compared to under nutrition.

ID: 296

Gender and the 10-13-Year-Old Walk Pattern

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State Higher Vocational School in Tarnow, Institute of Health Sciences, Poland

Introduction: A walk is undoubtedly of great importance for human functioning at all stages of his life, hence the need for constant research on his cognition. Most analyzes show that in typically developing children, the variability of gait decreases with age to reach about 7 years of age. Depending on the parameters observed, some authors, however, pay attention to the further development of walking after crossing this age. Factors that determine gait parameters may include gender. Available analyzes indicating intersexual differences in this respect concern mainly adults or older people. There are no studies on children, in what is the key maturing period for them

Purpose: The aim of the study was to compare individual gait parameters in boys and girls aged 10 - 13 years.

Materials and Methods: The study involved 87 girls and 52 boys aged 10-13. The height and weight of the subjects were measured, the BMI index was calculated and the body mass status was determined. With G-Walk, the symmetry and range of pelvic movements were assessed in all three planes. The collected information has been subjected to statistical analysis.

Results: The girls examined, in proportion to the height of the body, did considerably longer steps during the walk than the boys, but there was no gender differentiation in the symmetry of the pelvic movements in any of the planes. All children were characterized by the highest pelvic mobility in the transverse plane, the smallest in sagittal, although a larger range of pelvic movement in the walking, both in the frontal and transverse plane, was demonstrated in boys. Observed differences were significant only for the right side of the pelvis. In the sagittal plane, however, significant differences in the position and range of motion of both the right and left sides of the pelvis were noted.

Conclusions: The movement of the pelvis during gait in girls and boys aged 10 - 13 years is significantly different. In boys, a significantly larger range of motion and a slightly higher symmetry index are observed.

ID: 295

The Influence of Excessive Body Weight in Children on the Range and Symmetry of Pelvic Movement in a Walk

Jankowicz-Szymanska, Agnieszka[1]; Smoła, Eliza[1]; Mikołajczyk, Edyta[2]
[1]State Higher Vocational School in Tarnow, Institute of Health Sciences, Poland; [2]University of Physical Education in Krakow, Department of Physiotherapy, Poland

Introduction: A walk is undoubtedly of great importance for human functioning at all stages of his life, hence the need for constant research on his cognition. Most analyzes show that in typically developing children, the variability of gait decreases with age to reach about 7 years of age. Depending on the parameters observed, some authors, however, pay attention to the further development of walking after crossing this age. Factors that determine gait parameters may include gender. Available analyzes indicating intersexual differences in this respect concern mainly adults or older people. There are no studies on children, in what is the key maturing period for them.

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Conclusions: The movement of the pelvis during gait in girls and boys aged 10 - 13 years is significantly different. In boys, a significantly larger range of motion and a slightly higher symmetry index are observed.

POSTER PRESENTATIONS
POSTER VIEWING 2

POSTER PRESENTATIONS: POSTER VIEWING 2

Presentations

ID: 147

Antioxidants in Correction of Autonomic Cardioneuropathy in Children and Adolescents with Diabetes Mellitus

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[1]Ogarev Mordovia State University, Russian Federation; [2]Mordovian Republican Clinical Children's Hospital

Introduction: Clinical efficiency of antioxidants (AO) in diabetes mellitus (DM) and its complications has been proved by the evidence-based medicine in adult patients, while in pediatric population it has not been thoroughly studied.

Aim: To estimate AO efficacy in correcting the signs of autonomic cardiac neuropathy in children with type I DM.

Methods: 98 patients with DM aged 5-18 yrs and 40 healthy children and adolescents were included in open clinical trial, conducted with Local Ethic Committee approve. Written informed consent was obtained. The inclusion criteria were: DM experience more than 5 years, disturbances of autonomous heart rhythm regulation (signs of autonomic cardioneuropathy). The exclusion criteria were: structural heart diseases, QTc interval prolongation ≥480 on rest electrocardiogram (ECG), left ventricle ejection fraction < 50%. Children were examined by clinical, biochemical methods, 12-lead ECG, cardiovascular tests and Holter monitoring with heart rate variability (HRV) evaluation. The patients were randomized into 4 groups. Group 1 was treated by combination of ultra-short and long-lasting insulins without AO, groups 2-4 additionally took L-carnitine, α-lipoic acid and methylethyl-3-oxypyridinum succinate (MEOS) respectively. AO were administered for 1 month 4 times per year.

Results: MEOS and α-lipoic acid decreased the mean daily and (slightly less) mean nocturnal heart rate as well as frequency of revealing pathological circadian index values (mean daily to mean nocturnal heart rate ratio) to 20-26% vs 42% in group 1. AO contributed to optimization orthostatic, Valsalva and 30:15 test results. The use of AO diminished heart rhythm concentration (rMSSD and pNN50% increase by 23-69%), but normalized SDNNi only in group 4, probably due to metabolic control and glycosylated hemoglobin level optimization. Long-term use of AO, especially MEOS and α-lipoic acid increased the capacity of all heart rhythm spectrum components (especially high frequency HF), approaching low to high frequency ratio LH/HF to healthy-control level, while in group 1 a tendency for worsening both sympathico-vagal balance and cardiovascular test results was noted.

Conclusion: AO, especially MEOS was noted to slow down the rates of diabetic autonomic cardiac neuropathy progression in children with type 1 DM.

ID: 273

Genetic Analysis of TPO Gene in Children with Permanent Congenital Hypothyroidism Suspected Dyshormonogenesis

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Introduction: Congenital primary hypothyroidism (CH) occurs in approximately 1:2000 to 1:4000 newborns and is one of the most common preventable and treatable causes of intellectual disability. Inadequate thyroid hormone production leading to primary hypothyroidism is more commonly caused by thyroid dysgenesis, but in 15% of cases inborn errors of thyroid hormone synthesis are present (Dyshormonogenesis). Mutations in the peroxidase thyroid (TPO) gene are the most frequent.

Methods: We included children followed in our tertiary center for CH with clinical and echographic characteristics compatible with dyshormonogenesis. Genetic testing for dyshormonogenesis was performed - in our center only the peroxidase thyroid (TPO) gene – was analysed, through direct sequence for the presence of mutations.

Results: Nine patients were included in the study, 55% males (n=5). Eight patients (n=8) were diagnosed through the endocrine-metabolic neonatal screening and one was diagnosed after detection of goiter on the prenatal ultrasound. Mean value of TSH at diagnosis was 208 uUI/mL (min. value 35.9; max. 393). All patients initiated treatment with levothyroxine in the first month of life. One third of the patients had positive family history of thyroid disease. Mutations in the TPO gene were found in two patients - one with two biallelic variants c.1472G>A and c.1993C>T and another with a biallelic variant c.1769-1G>A. Neither had family history of thyroid disease.

Conclusions: We found a novel variant c. 1769-1 G>A in the TPO gene, not described in the literature, that is probably pathologic, but we need further evaluation to confirm. In our center, only the TPO gene was tested, but other gene mutations, as DUOX2, TG and TSHR are also common genetic defects associated with CH patients, that we could have found in these patients, if analysed. The authors would like to reinforce that patients in whom CH is proven to be permanent, as in dyshormonogenesis, genetic counselling and thyroid hormone replacement throughout life is required.

POSTER PRESENTATIONS: POSTER VIEWING 2

ID: 158

Low Level of Vitamin D Increases the Risk of Low Energy Fractures in Children.

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Centre Hospitalier Universitaire Notre Dame des Secours, Byblos, Jbeil, Lebanon (Lebanese Republic)

Introduction: The physiological process by which vitamin D regulates calcium and phosphorus metabolism, the major mineral constituents of bone tissue, is by far very well understood. However, the clinical implementation of vitamin D deficiency on bone fragility in childhood remains controversial.

Objective: The aim of this case-control study is to investigate the prevalence of vitamin D deficiency among Lebanese children who experienced a "low-energy" fracture in our center.

Materials and Methods: A total of 37 cases and 70 control patients were included in this study. All healthy children admitted to the emergency department between 1 and 15 years of age were potential candidate for this study. Fracture was confirmed by conventional X-ray radiography and 25-HydroxyVitamin D level of the same candidates was measured.

Results: A total of 19 patients out of the 37 cases were suffering from vitamin D deficiency (25-hydroxyVitamin D < 20 ng/ml), whereas only 13 out of the 70 control candidates were found to have deficiency in vitamin D. A statistically significant relationship between D hypovitaminosis and low energy fractures has been noticed among children between 1 and 15 years of age who presented to the emergency department of Notre-Dame des Secours University medical Center (OR: 4.63; 95% CI: 1.92 – 11.18; X2: 12.41, P-value: 0.000428).

Conclusion: A relation has been established between vitamin D deficiency and low energy fractures in Lebanese children. However, the reasons behind D hypovitaminosis, despite sufficient amount of sunlight exposure, in Lebanese pediatric population are still to be considered. Furthermore, a larger sample and multicenter study will be needed to determine if a relationship exists between the severity of vitamin D deficiency and the frequency of fractures and their complications.

ID: 185

Primary Hypothyroidism in Children: Unusual Clinical Presentation

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Ministry of Health Holdings, Singapore

Introduction: Primary Hypothyroidism in children is not uncommon and has an incidence of 1 in 4000. Presentation of acquired hypothyroidism is subtle as the symptom complex is generalized and non-specific. Pleural and pericardial effusion is a rare complication of severe hypothyroidism in children but can be present in 10-30% of adults. It may be a frequent manifestation in myxedema, but rarely associated with mild hypothyroidism, reported incidence of 3-6%. The pathophysiology of edema in hypothyroidism has been studied extensively. Myxedema refers to the deposition of hydrophilic mucopolysaccharides in the dermis, which results in swelling of the affected area. When the pericardial volume expands, it causes the pericardial pressure to increase, resulting in accumulation of pericardial fluid in the pericardial space.

Clinical Case: A seven-and-a-half-year-old girl, presented with cough for 1 month and generalized edema for 3 weeks She was previously well, with no history of cardiac or renal problems. She gained 7kg in 5 months and her weight plotted between the 75th-90th centile while the height was at 3rd centile. The swelling involved the eyes, legs, abdomen, and was worst at the end of the day. Also noted to have poor appetite, constipation and cold intolerance for the past 6-8 months. The child was otherwise doing well in school and reached her milestones appropriately. There is a positive family history of hypothyroidism—the child's mother has hypothyroidism that was diagnosed 10-15 years ago, and is on levothyroxine replacement. On examination, she appeared dull with sallow look and generalized edema. There were no signs of congestive cardiac failure and cardiovascular examination including blood pressure was normal. There was a small palpable goiter and rest of the examination was normal. In view of the symptoms of prolonged cough and generalized edema, a chest-radiograph was done. It showed a globular cardiac silhouette raising suspicion of pericardial effusion and echocardiogram revealed pericardial effusion with echogenic pericardium, and mild bilateral pleural effusion. Other chemical biochemistry showed acute renal impairment, mild transaminitis, elevated total and LDL cholesterol and mild anemia. Autoimmune screen was normal. Thyroid functions showed a markedly raised thyroid stimulating hormone (TSH) with low FT4 and raised thyroid peroxidase antibody which clinched the diagnosis of autoimmune primary hypothyroidism. Thyroid ultrasound showed a heterogeneous gland with slightly increased vascularity. Thyroxine was started as a low dose and increased slowly to achieve biochemical and clinical euthyroid state. The pericardial effusion resolved in 3 months and metabolic derangements normalized with thyroxine replacement.

Conclusion: In patients presenting with chronic non-specific clinical symptoms with generalized edema, hypothyroidism must be considered in the differential diagnosis. Also, once diagnosis is established it is good to look for complications like pericardial and pleural effusion especially in cases of severe hypothyroidism. Conversely in patients presenting with unexplained pericardial or pleural effusion, hypothyroidism must be considered in the diagnosis. Early recognition and treatment with thyroxine could eliminate the need for unnecessary diagnostic procedures and invasive measures and reduce the risk of progression to cardiac tamponade.

ID: 243

A Case of Pulmonary Tuberculosis Presenting as Lobar Pneumonia

Barreto Mota, Ricardo[1]; Pimenta, Sofia[2]; Ferraz de Liz, Catarina[2]; Rodrigues, Joana[2]; Ribeiro, Maria do Céu[2]; Brandão, Carla[2]; Vieira, Lucília[2]; Carvalho, Isabel[3,4]; A. Barbosa, Rosa[2]
[1]Department of Pediatrics, Centro Hospitalar São João, Portugal; [2]Department of Pediatrics, Centro Hospitalar Tâmega e Sousa, Portugal; [3]Vila Nova de Gaia Pneumologic Diagnostic Center; [4]Department of Pediatrics, Centro Hospitalar Vila Nova de Gaia / Espinho

Introduction: Tuberculosis is an important cause of morbidity and mortality in children worldwide. Diagnosing this condition is especially challenging in infants and young children due to non-specific clinical manifestations and its overlap with several other diseases, including pneumonia. Tuberculosis is an important cause of morbidity and mortality in children worldwide. Diagnosing this condition is especially challenging in infants and young children due to non-specific clinical manifestations and its overlap with several other diseases, including pneumonia.

POSTER PRESENTATIONS: POSTER VIEWING 2

Case Description: A previously healthy 13-month-old male toddler was brought to our emergency department (ER) due to fever in the previous 12 days and productive cough and rhinorrhea in the previous 3 days. He was on the third day of treatment with amoxicillin for an acute medial otitis. When observed in the ER, he had a good general appearance, bilateral tympanic membrane erythema and normal, clear, and symmetric breathing sounds in the pulmonary auscultation. The blood analysis revealed elevated white cell count and C-reactive protein. The chest radiography revealed a density in the right upper lobe. Given this workup, he was diagnosed with pneumonia, admitted and treated with ampicillin. Despite being well-appearing, active and having adequate food intake, the fever persisted during the first week of hospital stay. On the eighth day, the toddler's family was informed that his grandmother, with whom he had daily contact during the previous month, had just been diagnosed with pulmonary tuberculosis. A lung computed tomography was performed, revealing upper right lobe atelectasis and several hilar and mediastinal adenopathies compressing the right upper bronchus. The bronchoscopy confirmed the external compression of the same bronchus. Gastric aspirate was collected and tested with nucleic acid detection through polymerase chain reaction amplification for Mycobacterium Tuberculosis Complex, which was positive. Acid-fast direct smear and Interferon-γ release assay were also positive. Cultures revealed the same microorganism, confirming the diagnosis. He started anti-tuberculosis treatment with good clinical evolution.

Conclusion: In children less than 5 years of age, primary pulmonary disease is more frequent, presenting as several days of low-grade fever and mild cough. The most common radiographic feature is hilar and mediastinal adenopathy and small parenchymal focus. In some cases, and especially in infants, the enlarged lymph nodes may compress nearby bronchus causing external stenosis and subsequent complications including necrosis, emphysema, atelectasis or a segmental lesion mimicking lobar pneumonia. This clinical case highlights the challenge of diagnosing tuberculosis in young children, being an example of a clinical overlap with another potentially severe disease.

ID: 294

Case Description of Kawasaki Disease in a Toddler following Vaccination against Meningitis B (BEXSERO®)

Anastasiou-Katsiardani, Anastasia; Papakyritsi, Dimitra; Psiropoulou, Anna; Tanou, Kalliopi; Lampri, Maria; Tsakos, Konstantinos; Apostolou, Maria-Ioanna; Margaritopoulou, Vasiliki; Papathanasiou, Ioanna
National Health System, Greece

Introduction: Kawasaki disease ("mucocutaneous lymph node syndrome") consists of various clinical symptoms & signs, mainly high fever (lasting over 5 days), that usually occurs in children under 5 years old. It's a systemic vasculitis often accompanied by cardiac complications such as coronary arteries' aneurysms. Its characteristics point to an infectious origin, although genetic predisposition cannot be excluded. Purpose:Sensitization of hospital and private pediatricians about the significance of early diagnosis and treatment of Kawasaki disease since it's the most common cause of acquired heart disease in childhood.

Case Description: A 2.5-year-old male toddler referred from a private pediatrician to our Pediatric Clinic, due to a 2-day high fever (following vaccination against meningitis B) accompanied by diarrheas and diffuse maculopapular erythematous rash on face, trunk, genital area and extremities, including palms and soles (edematous).

Results: His lips were reddish, cracked and edematous. Gingivitis, conjunctivitis, blepharitis were present and two days after his admission to our clinic, cervical lymphadenopathy was noted. He had received treatment with antihistamines and amoxicillin-clavulanic acid, prescribed by the private pediatrician, (was discontinued after hospital admission) and we started treating him with cefuroxime. His laboratory tests revealed gradual elevation of WBCs, transaminases and inflammatory markers (WBC: 15970, 17800, 20600, N: 67%, 78,80%, 70,7%. ESR (mm/h) :30,41,2,CRP(mg/L): 68,80,66,74,91). Thrombocytosis occurred the 7th day of the disease (458000/μl) and platelet count reached over 1,000,000 two weeks after initiation of fever. Also, serum albumin levels gradually decreased 10 days after initiation of fever. Blood and pharyngeal cultures were negative. Virological and serological tests for EBV, CMV and HSV were negative, but the ones for Adenovirus were found positive. Cardiological assessment was performed on the 6th day of fever (normal findings), followed by initiation of therapy with aspirin (80 mg/kg/24h divided into 4 doses) and intravenous immunoglobulin (2gr/ kg /24h). Reduction of fever was noted within the first day of IVIG therapy and on the 9th day of the therapy (after heart ultrasound and reassessment, which were between normal parameters), the toddler was discharged continuing therapy with low-dose (anticoagulant) aspirin 5 mg/kg/24h. On the 7th day of hospitalization (10 days after onset of fever) palms exfoliation began and after a few days soles exfoliation began as well. One month after discharge from hospital, cardiological assessment and heart ultrasound were repeated, (no pathological findings).

Conclusions: Early diagnosis and appropriate treatment of the situation contributed to avoidance of disastrous consequences to our little patient's health (such as coronary arteries' aneurysms). It is assumed that a combination of an infectious (viral) factor, genetic predisposal or/and maybe the recent vaccination have triggered immune system's response and caused the described manifestation of Kawasaki disease.

ID: 264

Cerebral Malaria: The Reality of an Endemic and Underdeveloped Country

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Introduction: Malaria is a frequent but potentially fatal disease in tropical countries. According to published data, in Mozambique, malaria can reach prevalences between 40-80% in children 2-9 years. The presence of complications aggravates the prognosis.

Purpose: We aim to describe a case of complicated malaria in the pediatric age.

Case description: LN, 7 years old, previously healthy, got admitted in the emergency service (ES) with seven days of evolution of fever and general malaise. Observed at the beginning of illness by alternative medicine. He made paracetamol in fixed scheme, without improvement during this period. On the eve of admission, he had two episodes of tonic-clonic-generalized seizures. Observed at the local Health Center, rapid test for malaria performed was positive. At the physical examination, he presented Score Glasgow (SG) 10/15. He was given artesunate and was referred to the general hospital. He repeated convulsive crisis, requiring mannitol and phenytoin to control it. The blood count showed hemoglobin 8.9 g/dL, leukocytes 6800 /uL (76.3% neutrophils). A diagnosis of cerebral malaria with moderate anemia was assumed. LN initially manifested macroscopic hematuria in relation to malarial nephritis, and then progressed favorably. He was discharged after 8 doses of intravenous artesunate, with negative slide search for plasmodium and completed artemether + lumefantrine treatment during three more days.

POSTER PRESENTATIONS: POSTER VIEWING 2

From the neurological point of view with important recovery, although with limitations in speech and swallowing. Now maintains follow up in consultation of general Pediatrics, speech therapy and physiatry.

Conclusion: Malaria is an unavoidable reality in endemic countries. However, early diagnosis and timely therapy prevent many complications and improve the prognosis. We must be attentive to this diagnostic hypothesis, especially when we observe children who have contacted or been in countries endemic to the disease in the previous six months.

ID: 202

Febrile Splenomegaly: Presentation of Two Cases

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Introduction: Spleen enlargement or splenomegaly is defined as a palpable splenic edge felt more than 2 cm below the left costal margin. A palpable spleen tip may be a normal finding in up to 30% of newborns and 10% in healthy school-age children. Splenomegaly is associated with many different acute and chronic diseases.

Purpose: To present the diagnostic approach to the febrile child whose spleen is enlarged.

Cases Description: The first case concerns a 2 year old male child admitted to hospital due to a temperature of three days and splenomegaly. The second case concerns a 2 year old male child with a temperature of 5 days and splenomegaly that was outpatient investigated. In both cases biochemical, microbial and ultrasonographic investigations were performed. In the first case, according to the results, infectious mononucleosis was diagnosed. The disease had a favorable course and, with appropriate therapy, the child was discharged from hospital for a week. The child in the second case after the investigations due to prolonged fever and the finding of pancytopenia was sent to the University Children's Clinic where leishmaniasis was diagnosed.

Conclusion: The appropriate diagnostic approach in a child with temperature and splenomegaly is very important for a timely diagnosis, appropriate treatment and timely referral to an institution that provides a higher level of health care.

ID: 272

Meningococcal Disease Caused by Neisseria Meningitis Serogroup B- A Case Report

Pimenta, Sofia[1]; Soares, Joana[1]; Barreto Mota, Ricardo[2]; Leite, Ana Margarida[1]; Matos, Joana[1]; Ribeiro, Maria do Céu[1]; Reis, Ana[1]; Rodrigues, Joana[1]; A. Barbosa, Rosa[1]; Mendes, Catarina[1]; Brandão, Carla[1]
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Introduction: Neisseria meningitidis is the bacterium that causes meningococcal disease, one of the leading sources of community-acquired sepsis and meningitis among children. Thirteen serogroups of Neisseria meningitidis have been identified, but six of these serogroups (A, B, C, W135, X and Y) are responsible for majority of the infections worldwide. Meningococcal disease still is associated with a high mortality rate and persistent neurologic defects, particularly among infants and young children. The epidemiology of Meningococcal disease is extensively described and reviewed elsewhere, with serogroups B currently causing the majority of disease in Europe.

Case Description: An 8-month-old boy, previously healthy fully vaccinated according to the Portuguese programme and 1 dose of serogroup B meningococcal vaccine (Bexsero) was brought to Emergency Department with high fever, vomiting and irritability developing in the previous 24 hours. On physical examination he was irritable and pale. Lab tests revealed leukocytosis (21220/uL), elevated C-reactive protein (246,3 mg/L), prolonged PT and INR. Venous blood gas analysis revealed pH:7,42, pCO2:45 mmHg, lactate levels: 2,2 mmol/L and HCO3-: 20,1 mmol/L. He started treatment with ceftriaxone, vancomycin and fluid resuscitation. Lumbar puncture showed pleocytosis, hyperproteinorraquia and hypoglycorrhachia. Blood cultures and Polymerase chain reaction (PCR) analysis were positive for group B meningococcus and vancomycin was discontinued. The patient started showing clinical improvement within a few hours but was discharged after 10 days because of prolonged fever. Further investigation was conducted on an outpatient basis with immunological study and auditory evoked potentials.

Conclusion: Clinical presentation of meningococcal disease is varied and the concerns about this are valid, given the rapid onset of illness and the high morbidity and mortality. In the reported case, the patient was clinically stable with nonspecific signs on admission. It is important to consider this diagnosis even in the absence of suggestive symptoms or signs in order to provide an appropriate treatment and improve the outcome.

ID: 281

Multifocal Chronic Osteomyelitis to Multi Resistant Serratia marcescens and Bone Tuberculosis in Sickle Cell Disease

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Introduction: Bone infection is an especially challenging diagnosis in patients with sickle cell disease and frequently difficult to treat, needing a combination of aggressive surgical treatment and prolonged agent specific antibiotic therapy, further complicated by multiresistant bacterias.

Case Report: Nine-year old girl with sickle cell disease admitted in Luanda´s hospital with osteomyelitis and weight loss (7 kg). She started cefazolin and ciprofloxacin, followed by chloramphenicol and clindamycin and after 22 days she was admitted in our hospital with multifocal osteomyelitis. MRI showed osteomyelitis of humerus and radius bilaterally (with abscesses), bilateral arthritis of the elbows with left-handed effusion, synovitis/arthritis of the shoulders and spondylodiscitis of L4-S2. She was twice subjected to an orthopedic surgery for drainage of abscesses and joint decompression. The biopsies of bone and synovial liquid identified multiresistant Serratia marcescens, so she was medicated with meropenem and amikacin. Because there is no clinical improvement she received also hyperbaric oxygen therapy (20 sessions), with good evolution. After 32 days, she developed fever, leukopenia and neutropenia therefore vancomycin and amphotericin B were prescribed. Amphotericin B led to severe hypokalemia (1,7 mEq/L) and has been discontinued. He also presented tuberculin test and IGRA T-SPOT positives and considering spondylodiscitis, it was assumed bone tuberculosis and started isoniazid, rifampicin, pyrazinamide and ethambutol. After one

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month she had toxic hepatitis requiring the interruption of tuberculostatic therapy and replacement of isoniazid with levofloxacin. She was discharged after 90 days and today still has some limitations: a slight one on right arm's extension; on extension and supination of the left arm; and an abduction, anterior flexion and external rotation of her left shoulder.

Discussion: Osteomyelitis complications can be severe causing significant impairment on bone development and quality of life. An early diagnosis and appropriate therapy can greatly improve long term outcome. Besides antibiotic, adjuvant therapies such as bone decompression surgery or hyperbaric oxygen may be required on chronic and recurrent cases. As this case points out, when facing chronic osteomyelitis, not responding to usual therapy, clinicians should be aware of bone tuberculosis, particularly when treating patients from endemic areas.

ID: 284

Relapsing Orbital Myositis and Streptococcal Infection

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Introduction: Orbital myositis is an inflammatory disease of extraocular muscles. It is quite rare in children and may be oligosymptomatic or severe (in this case with ptosis and proptosis). Although the majority are idiopathic, it may be associated with systemic disorders, and some forms have been associated with infectious diseases, such as streptococcal pharyngitis.

Case Report: A 14-year-old boy was admitted with pain on the right eye, diplopia, proptosis and ptosis with one-week evolution and progressive deterioration. He had no fever or other symptoms. Two years prior he had a similar episode, treated with steroids. He had a history of recurrent episodes of tonsillitis. CT showed enlargement of the rectus superior and right eyelid and enlargement of the orbital muscles on the left eye. His complete blood count was normal, CRP 0.8g/L, ASO titer 1200 UI/ml and Anti-Dnase B Ab 824 UI/ml. The remaining work-up was normal. 11 months later he presented with periorbital swelling of the left eye, pain with eye movements and diplopia. The throat was hyperemic. CT showed enlargement of the inferior obliquus muscle. Rapid antigen detection for group A streptococcus was positive and he was given with intramuscular penicillin injections (1200000 UI) and methylprednisolone pulses. He started monthly penicillin prophylaxis without new episodes of myositis. Additionally, tonsillectomy was performed in July 2018 with pathology report of the tonsils revealing bacterial aggregates in the tonsillar crypts.

Comments: We describe a recurrent orbital myositis associated with serological evidence of recent streptococcal infection. This case suggests a possible post-streptococcal immune mechanism for this disease. As other manifestations of the post-streptococcal syndrome, orbital myositis appears to have an immune mechanism of lesion an, as such, could be explained in this context.

ID: 235

Renal Nodular Lesion in Newborn: Xanthogranulomatous Pyelonephritis

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Introduction: Neonatal renal nodular lesions may have several etiologies, namely infectious, neoplastic, malformative and/or cystic, requiring diagnostic acuity and specific complementary examinations.

Case Description: Female newborn, 18 days old, previously healthy, admitted to emergency room (ER) due to hematuria and refusal to feed with 24 hours of evolution. The physical examination was normal. Urinalysis showed leukocyturia and newborn was hospitalized under ampicillin and gentamicin, completing 10 days. Urine culture was inconclusive (10^4 CFU/ml, 2 types of colonies). At D10, fever was reported for the first time associated with leukocyturia and worsening of serum inflammatory parameters. At that time urine culture revealed Enterococcus faecalis, sensitive to ampicillin. The patient performed ampicillin and amikacin for 10 days and then cefuroxime. Renal ultrasound (D19) showed a heterogeneous lesion in the middle third of the left kidney, with a subsequent increase in size, which justified renal MRI (D23): "nodular lesions in the left kidney (19mm and 25mm) with apparent peripheral enhancement after contrast (renal abscess? neoplastic lesion?)". Given the suspected diagnosis, the patient was transferred to our hospital on D27. Determination of tumor markers and urinary catecholamines were normal. Percutaneous kidney biopsy confirmed a xanthogranulomatous inflammatory process. The evolution was favorable under systemic antibiotic therapy (ampicillin and cefotaxime) with progressive reduction of lesion size and posterior calcification. The patient was discharged under antibiotic prophylaxis, with no new episodes of urinary tract infection after 6 months of follow-up. The lipid profile and study of neutrophil function (Phagotest and Burst-test) were normal. VCUG excluded vesicoureteral reflux.

Conclusion: Xanthogranulomatous pyelonephritis is rare in the neonatal period. Histopathological examination is essential to confirm clinical suspicion and exclude other entities mimicked by focal and unilateral progressive disease. Treatment includes surgery and/or antibiotic therapy. There are few cases described in the literature with favorable evolution only under prolonged systemic antibiotics, but their use allows a greater preservation of renal function.

ID: 244

Effect of Preoperative Nutritional Status on Postoperative Outcomes in Children with Congenital Heart Diseases Undergoing Surgical Repair in a Tertiary Healthcare Center In Lebanon.

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Introduction: Malnutrition has been consistently reported as being common in children with congenital heart diseases (CHD) with prevalence varying from 25 to 90%. Studies in developed countries have shown that malnutrition at the time of surgical intervention was associated with poorer outcomes postoperatively. Data from developing countries are lacking.

Purpose: To determine the prevalence of preoperative malnutrition in children with CHD undergoing surgical repair and to evaluate its effect on postoperative outcomes: length of hospital stay, length of stay in the intensive care (ICU), duration of mechanical ventilation, duration of use of ionotropic support and rate of infections, in a tertiary healthcare center in Lebanon.

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Materials and Methods: We conducted a retrospective cohort study in a single tertiary healthcare center in Lebanon. Children aged between 1 month and 5 years with CHD, undergoing surgical repair between January 2015 and January 2017 were included in the study. Anthropometric measurements were recorded and z-score for weight for height (if < 2 years of age) and BMI (if > 2 years of age) were calculated. We adjusted for the severity of the cardiac condition using the RASH-1 score model. Outcomes recorded were length of hospital stay, length of stay in the ICU, duration of use of ionotropic support and rate of infections.

Results: 143 patients fulfilled the inclusion criteria. 35 patients (27%) showed malnutrition on admission and it was more common in those under 2 years of age (34.1% vs 13.2%). Using regression on the bivariate level: height for age z score, weight for age z score, and BMI for age z score were statistically associated with the length of ICU stay. On the multivariate level when the predictors were adjusted for RACHS score, and type of heart disease (acyanotic/cyanotic); height for age z score and weight for age z score were significantly inversely associated with length of ICU stay (beta coefficient -5.97; CI (-10.2,-1.91) and -6.07; CI (-9.8,-2.3) respectively.

Conclusion: The prevalence of malnutrition in our cohort was 27% and it was more common in those <2 years of age. Furthermore, it is in this age group that we found a significant inverse correlation between anthropometrics defining the nutritional status and one of the outcomes: length of ICU stay. This may prompt physicians taking care of patients with CHD to develop tools to define and optimize their nutritional status especially if they are in the younger age group before scheduling their surgical repair.

ID: 217

High-Protein Diet in Hepatic Lipid Accumulation Management of Non-alcoholic Fatty Liver Disease. A Literature Review.

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Introduction: Hepatic steatosis is the simplest stage in non-alcoholic fatty liver disease (NAFLD), which could precede a more severe stage of hepatocellular inflammation and damage, such as non-alcoholic steatohepatitis (NASH) and cirrhosis, caused by the accumulated fat. Some studies on the effect of high protein (HP) intake to reduced accumulation of hepatic lipids have been published recently, but its long-term effect and the responses of gene expression to HP remain to be fully unexplored.

Aims: To assess the effects of protein supplementation against increased intrahepatocellular lipids (IHCL) in long-term intervention studies on humans. Moreover, the author considers studies on humans and rodents, which investigated mechanisms of the regulation of gene expression underlying IHCL reduction in response to HP.

Method: A literature search on PubMed and Cumulative Index of Nursing and Allied Health Literature (CINAHL) using the following search terms: hepatic steatosis, HP and gene expression, for relevant articles. Eligible publications are consistent with published intervention studies in English language on adult and rodents (mice or rats).

Result: Energy intake total, BMI, body weight and insulin resistance remained unchanged in long-term response to an HP, compared with baseline. Protein intake increased significantly whereas carbohydrate and fat consumption decreased. The IHCL reduction was strongly associated with added protein consumption after 4 weeks, although the evidence was weaker for longer intervention periods. Evidence from studies on humans and rodents demonstrated that increased fatty acid beta oxidation activity through increased uptake of free fatty acids into the mitochondria due to upregulated expressions of Cpt1, CD36, but inhibition of lipogenesis genes when responding to an HP diet.

Conclusion: The results of the present review cannot confirm the long-term effect of increased protein intake on IHCL reduction, due to the lack of enough strong evidence in these intervention studies on humans. However, the long-term effect of HP consumption and a spontaneous reduction in carbohydrate and fat intake to maintain caloric balance were strongly linked. There was a strong correlation between Beta-fatty acid oxidation and upregulation of translocate protein on outer mitochondrial membrane (Cpt1 and CD36) in response to a HP diet. Cpt1: Carnitine palmitoyltransferase

ID: 137

Practical Approach for Nutritional Support of Orphan Children with Larsen Syndrome and Severe Nutrition Deficit (Case Management)

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Introduction: The development of medical technologies and rising of frequency of survival of children with critical anomalies or illnesses during recent years have led to an increase in the proportion of children who are in need of a complete palliative care system, including a range of nutritional support. A separate problem is the provision of necessary nutrients to orphans which are in the children's facilities. A separate problem is the provision of necessary nutrients to orphans which are in the children's facilities. Unfortunately, the "empirical" approach is the reality of most orphanages.

Aim: The aim of study is the evaluation of the degree of nutritive deficiency in the child with Larsen syndrome and working out individual nutritional support.

Materials and Methods: The anthropometric methods of diagnosing the degree of protein-energy insufficiency (Brock 2, Piney, Z-score indices) are used. The energy requirement was calculated with Schofield (WH) equation. Identification of foodstuff worked out.

Case Description and Results: A boy I., 1 year 2 months weighs 4 kg, height 66 cm, entered the hospital from an orphanage. The main diagnosis of the child is Larsen syndrome. He's fed a semi-customized milk formula with conventional feed. The actual intake of energy at a dose of 600 ml/day was 100,5 kcal/kg, protein – 2,2 g/kg/day. An increase in body weight over the last six months is 250 g. Brock 2 index was 40 %. The Z-score WtA was "-" 6, a Z-score HtA – "-" 12, the Z-score WtHt – "-"3.5. The Piney index was 19. That is, with a symmetric delay in all indices of physical development, the assessment may be normotrophy, while the child has a severe form of malnutrition. The obtained data testify in favor of the extreme degree of nutritional insufficiency. The physiological energy requirement according to Schofield (WH) equation – 384,55 kcal/day. The energy expenditure taking into account all coefficients is 460,92 kcal/day on the actual body weight.

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Considering the impossibility of a sharp load, the energy demand was estimated at 115 kcal/kg during the adaptation period. The needs in proteins for children are set at 1,2-1,5 g/kg per day. Since ESPGHAN recommendations, it was decided to add the product of clinical nutrition (Infatrini, N.V.Nutricia, Netherlands). At the end of the week, the child assimilated 70 ml of food, of which: 20 ml of anti-reflux formula, 50 ml Infatrini, 10 times a day. Thus, 480 kcal/day and 16,2 g per day protein was hold in the volume of the enteric substrate, which the child tolerates well. During 10 days the child increased body weight by 100 g and became calmer, showed an interest in environment.

Conclusions: Deep protein-energy insufficiency in children with combined neurosomatic pathology can be corrected by carefully calculating the actual energy needs and the appointment of specialized clinical nutrition. The usage of standardized indexes of physical development to determine the degree of nutritional deficiency and products for establishing energy needs in the practice of nutritional support for children of the palliative group can contribute the establishing of the adequate nutrition.

ID: 193

Successful Adaptation of "MyPlate" Method for Improving the Quality of Midday Meal of Pre-schoolers in Suburban Sri Lanka

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Introduction: Good nutrition in children is essential for satisfactory physical and emotional growth, intellectual development and productivity. Nutritional deficiency in children therefore, not only has implications on health, but on the socioeconomic development of the country. The diet a child should provide all macro and micro nutrients needed in correct proportions. Diet of Sri Lankan children is rice based. Although a wide variety of vegetables and fruits are available locally at a reasonable price, rice is considered the most important item in a child's diet. Hence, children's diets are of poor quality. Since mothers play a main role in feeding children, providing them with a practical method of providing a palatable, high quality meal at affordable cost using local food might help to improve their diets. "Myplate" for preschoolers is a method developed by the United States Department of Agriculture, to ensure a nutritious diet to preschool children. We developed a colorful poster using locally available vegetables, fruits, grains, proteins and dairy food based on the Myplate method to be used by local mothers.

Purpose: This study was performed to evaluate the effectiveness of the locally adapted plate method in improving the quality of mid-day meal offered to preschool children.

Materials and Methods: A cluster randomized interventional study was conducted among 60 mothers of children aged 2-5 years in a suburban area in Colombo. Mothers in both control (n=30) and intervention (n=30) groups were provided with a standardized plate and were and asked to photograph the mid day meal of the child for 1 week (baseline). Both groups were given nutrition education including correct food groups and proportions, while the intervention group was taught the plate method and given the poster. They were asked to photograph the child's meal immediately and 2 months afterwards, for a week. The quality of the food plate was assessed using a numerical score (total 10) giving 1 mark for the correct food group and 1 mark for the correct proportion. Each food group was also scored separately.

Group	Baseline Assessment (Mean/±SD)	Immediate Assessment (Mean/±SD)	Follow-up Assessment (Mean/±SD)	p Value	
Intervention (n =26)	4.38/±0.73	6.79/±1.00	_	a	0.00*
	4.38/±0.73	_	6.57/±1.05	b	0.00*
		6.79/±1.00	6.57/±1.05	c	0.41
Control (n = 28)	3.95±0.53	5.00±1.70	_	a	0.00*
	3.95±0.53	_	4.76±1.50	b	0.00*
	_	5.00±1.70	4.76±1.50	c	0.36

Results: The quality of the food plate improved significantly in both groups ($p<0.5$) which was sustained at 2 months, with a bigger effect in the intervention group. The most striking change was a reduction of the carbohydrate and increase in vegetables and fruits offered.

ID: 112

A Twelve Year-old Asymptomatic Child with Pulmonary Inflammatory Myofibroblastic Tumor

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Introduction: Inflammatory myofibroblastic tumor (IMT) of the lung is a rare benign tumor accounting for 20% of pediatric lung tumors. Histologically, it is composed of fascicles of spindle cells with a prominent inflammatory infiltrate. IMT is now considered as a real neoplasm because of the proliferation of myofibroblastic cells and the malignant behavior with a high potential for recurrence. The differential diagnosis includes other benign or malignant lung tumors, congenital lung malformations and inflammatory diseases, such as tuberculosis (TB). The definite diagnosis of IMT is usually feasible after surgical resection due to the non-specific clinical and radiological features of the tumor.

Purpose: We present the case of a 12 year-old asymptomatic boy with a lung mass that coexists with chronic endobronchial infection. Although radiologic and laboratory findings were compatible with pulmonary TB, right lower lobectomy was performed and histological examination revealed a pulmonary IMT.

Case Description: A 12 year-old boy presented for further evaluation of a lung mass incidentally detected on a chest X-ray. Personal and familiar history was uneventful. The boy was fully immunized for age including Bacille Calmette-Guerin vaccine. Chest computed tomography (CT) scan showed a right lower lobe tumor with intense calcification associated with bilateral bronchiectatic lesions. Radiological images did not reveal protrusion of the mass into the bronchi lumen. Magnetic resonance imaging showed similar findings suggestive of TB or histoplasmosis.

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Flexible bronchoscopy showed diffuse inflammation of the bronchial mucosa and profuse mucopurulent secretions. Bronchoscopic picture was compatible with chronic endobronchial infection. Tuberculin skin test was marginally positive and Quantiferon-TB Gold positive, whereas Histoplasma antibodies were negative. Cultures in the sputum twice performed showed Haemophilus and Pseudomonas species, respectively. The clinical history of the child was indicative of a different diagnosis other than TB. Thus, right lower lobectomy was performed. Histopathological examination revealed the diagnosis of a pulmonary IMT. The patient was discharged in good general condition without any signs of relapse 14 months after surgery (clinical examination, CT).

Discussion: Although IMT is no longer considered as a reaction to an inflammatory insult, children with IMT may exhibit symptoms of chronic inflammation as did our patient. The precise etiology of the disease remains unclear. Children may show nonspecific and variable symptoms. Radiological imaging is useful in suspected lesions, but the diagnosis is usually confirmed only by histopathological assessment.

Conclusion: Pulmonary IMT is an uncommon disease, but with significant morbidity among the pediatric population. Because of the potential malignant behavior of this tumor, raised awareness and close follow-up are vital of this potentially misdiagnosed and lethal disorder.

ID: 291

Cytomegalovirus Infection: A Case Report

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Introduction: Cytomegalovirus (CMV) infection is the most frequent congenital infection affecting worldwide 1% of all live births. CMV infection acquired perinatally is far more frequent then those acquired transplacentally, ranging from 10% to 15%. The incubation period of perinatal CMV infection ranges from 4 to 12 weeks. Almost 90% of full-term perinatally infected newborns are asymptomatic. Although CMV pneumonitis, retinitis and gastrointestinal disease are infrequent in those neonates it can be common and severe in immunosuppressed infants.

Case Description: We present an 8 months old male with severe persistent respiratory distress present since he was born, without improvement with bronchodilator or inhaled steroids and poor weight and height gain. He was initially observed in his residence area hospital and then referred to a specialized Pediatric Pulmonology consultation. There, he had normal alpha-1 antitrypsin, negative sweat test and negative CMV IgM, with positive IgG. Thoracic CT scan revealed atelectasic densification in the upper lobes and parenchymal changes in “depolished glass”. Bronchofibroscopy demonstrated a normal-looking bronchoalveolar lavage and CMV DNA test was strongly positive. The transfontanellar ultrasonography and ophthalmologic and hearing evaluation were normal. It was also performed a blood CMV DNA test and in the Guthrie Filter Paper CMV tests who were negative. The immunological evaluation was normal and the cardiac study was normal to. Hospitalization was decided for intravenous ganciclovir therapy for 21 days, followed by oral valganciclovir therapy for a total of 6 months. During this period there was a clinical marked improvement and the patient is now perfectly well without any signs of respiratory distress.

Conclusion: Persistent CMV infection may cause a diffuse necrotizing pneumonitis with fibrosis not only in immunocompromised but also in immunocompetent infants. In this patients, CMV infection should be identified and if confirmed specific antiviral therapy may be the only therapeutic option. In this case the authors want to emphasize the late diagnosis as well as a difficulty in its certainty.

ID: 175

Effect Of Probiotic Supplementation (Lactobacillus Reuteri) in Patients With Cystic Fibrosis (CF)

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Introduction: Probiotics are proven to reduce intestinal inflammation in children with cystic fibrosis (CF) and may reduce the duration of respiratory and gastrointestinal diseases.

Aim: We want to determine the effects of the probiotic Lactobacillus reuteri on symptoms of respiratory and gastrointestinal diseases in CF.

Methods: 38 patients with CF (2-24y, mean age 9.6± 4.2), received probiotic Lactobacillus reuteri for 6 months. Main outcome parameters were forced expiratory volume (FEV1), FVC (forced vital capacity) and change in anthropometric parameters.

Results: In the study were measured FEV1 and FVC in CF patients before and after they received probiotic Lactobacillus reuteri. We found significant difference for FEV1 ($p<0.05$) and FVC ($p<0.05$), in both children and adolescents. We didn’t find significant difference for body weight, body height and for BMI, but the patients were heavier after 6 months.

Conclusions: Probiotics may delay respiratory impairment and gastrointestinal inflammation, but further studies are needed.

ID: 283

Non-Cystic Fibrosis Bronchiectasis in Childhood: Clinical Features, Etiology and Outcome

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Introduction: The most common cause of bronchiectasis in developed countries is cystic fibrosis. However, a variety of other disease processes can lead to its development, most of which include some combination of bronchial obstruction and infection.

Purpose: To describe the clinical profile, etiology and outcome of children with diagnosis of non-cystic fibrosis bronchiectasis.

Materials and Methods: Retrospective study, through clinical processes analysis of patients from pediatric pulmonology in a tertiary hospital in Portugal in the last year (August 2017 to August 2018). Patients with severe neurological diseases were not included.

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Results: There were 31 patients with the diagnosis of non-cystic fibrosis bronchiectasis, most of them with history of recurrent low respiratory infection, 52% females, with a median age of 12 years. The most common symptoms on presentation were productive cough, breathlessness, wheezing and repeated pneumonia. Diagnosis was based on findings in high resolution computerized tomography of chest; bronchiectasis were found in both lungs in 11 (35.5%) cases, and in 20 (64.5%) cases the location was unilateral. There was association with atelectasis in 15 (48.4%). The underlying cause was identified in 17 (54.8%). Common causes were post-infectious in 11 (35.5%) and confirmed primary ciliary dyskinesia in 3 (9.7%). Complications were observed in 19 (61.3%) patients, being the most common recurrent low respiratory infections (12 cases, 38.7%), and hemoptysis (5 cases, 16.1%). Three children (9.7%) required surgery. The most frequent medical treatment prescribed was respiratory physiotherapy (20 patients, 64.6%), followed by inhaled corticosteroids (11 patients, 35.5%), in wheezing children. Currently, all children are stable.

Conclusion: With this paper we try to remind the existence of non-cystic fibrosis bronchiectasis in pediatric population often without many respiratory symptoms, and the need to be aware of early diagnosis and appropriate therapy (respiratory physiotherapy, vaccines and aggressive treatment of any infection that arises). This can make the change in patient's future quality of life in childhood and adult life.

ID: 152

Two Year Follow Up of Hyperimmunoglobulin E Syndrome with Giant Bullae of The Lung: A Case Report from Indonesia

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Introduction: Hyperimunoglobulin E syndrome (HIES) is a primary immunodeficiency disease with genetic mutation as its etiology and characterized by extremely high serum IgE levels, accompanied by musculoskeletal, facial and dental abnormality together with recurrent bacterial and/or fungal infections of the subcutaneous tissue, skin, respiratory tracts, lung and bone. Not only, it is difficult to determine HIES in childhood due to its broad-spectrum clinical characteristic, but also the lack of diagnostic tools and resources in developing country play significant role in the postponement of identifying the disease. Therefore, a delay in identifying HIES may cause serious complications. Multiple morbidity and complications in HIES lead to disruption of children's growth and development.

Purpose: This case report was about two years observation on a boy with HIES. Difficulty in identifying the disease in limited resources as well as the complexity of HIES comorbidities, resulted in postponement of adequate HIES management. Giant bullae in the patient's lung were the result of HIES complication due to recurrent bacterial and fungal infection in the respiratory tract and lung. This condition affected patient's growth and development, therefore; a long-term follow up in this patient is necessary.

Case Report: A case of a boy who develop signs and symptoms of primary immunodeficiency disease since his early stage of life, however, due to the lack of ability and resources in identifying the disease, HIES was diagnosed years later. Accompanying the high IgE level (144,136 IU/ml), recurrent infections on his skin, eyes, nails, respiratory tract and oral cavity were the common clinical manifestations. A giant bulla in the left lung was subsequently present and identified at the age of 8 years old. Decision not to perform bullae excision was taken, considering the later effects of the surgery on the patient. He had monthly transfusion of intravenous immunoglobulin and prophylaxis antibiotics as well as antifungals in order to minimize infections. Added with those medical conditions, some non-medical problems were also occurred, such as the lack of parental knowledge and acceptance regarding to the disease. These surely affected patient's quality of life (PedsQL score: 43.3).

Results: There are adequate changes in terms of behavior and acceptance toward HIES. Both parents of the patient had strong willingness to learn about HIES and support their son to have appropriate medical treatment continuously, while the patient learn to accept his disease and try to cope with medical and non medical instructions.

Conclusion: A two years follow up on a HIES patient with bullae in the lung has been done. There was a progress in term of patient's quality of life despite the serious comorbid.

ID: 209

Feeding Difficulties and Laryngomalacia Caused by a Thoracic Surprise

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Introduction: We present a 3-day-old girl with laryngomalacia and feeding difficulties caused by a hiatal hernia. Hiatal hernias are characterized by protrusion of the stomach into the thoracic cavity through a widening of the diaphragm. Hiatal hernias have been reported to affect 10-50% of the population.

Case Description: Girl born full term by spontaneous vaginal delivery after an uncomplicated pregnancy. Birth weight was 2760 g (3rd centile), length and head circumference were at the 50th centile. She was admitted to the maternity ward where "noisy breathing" was observed. Initial physical examination was normal, except for bilateral preauricular pits. An otorhinolaryngologist was consulted for persistence of an inspiratory stridor on the 3rd day of life and confirmed the presence of mild laryngomalacia. She was hospitalized at the neonatal medium care for monitoring. Pulse oximetry showed oxygen saturation just below normal ranges. Feeding difficulties were noticed, wherefore placement of a nasogastric feeding tube. Projectile vomiting and desaturation were observed immediately after feeding through nasogastric feeding tube. Radiography showed an abnormal air structure inside the thoracic cavity suspicious of a congenital diaphragmatic or hiatal hernia. The girl was transferred to the neonatal intensive care, enteral feeding was stopped, total parenteral nutrition and respiratory support with high-flow nasal cannula was started. Upper gastrointestinal contrast study confirmed the diagnosis of a large hiatal hernia with a thoracic stomach. On day 7 a laparotomic repair with Nissen fundoplication and placement of a gastrostomy was performed. Enteral feeding through gastrostomy was started 48 hours later. Respiratory support could progressively be diminished. Feeding difficulties (absence of nutritive sucking) were noticed afterwards. A neurologic workup, with electroencephalography and cranial ultrasound was normal. The patient was discharged from hospital on day 40 with home gastrostomy feeding. Genetics showed a large duplication on chromosome 9(9q34). Duplication of 9q34 is a very rare genetic condition associated with characteristic appearance, feeding difficulties, poor growth and related to an increased risk of developmental and speech delay. The COL5A1 gene which encodes a component of type V collagen, is imbedded in this duplication. Which might explain the large hernia, but up to now it has not been described.

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Conclusion: Laryngomalacia in newborns is relatively common and usually innocent, however when associated with feeding difficulties, requests immediate further evaluation. Full diagnostic work-up revealed a rare genetic disorder, which might explain the large hernia, but this association has not been described until now.

ID: 155

Investigate the Maternal-Baby Attachment and the Factors that Affect the Maternal-Baby Attachment

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Background and Aim: Attachment is an important concept for the child's development process. It develops between the mother and the baby, affects the physical, psychological and intellectual development of the child significantly. In this review article, it is aimed to investigate the maternal-baby attachment and the factors that affect the maternal-baby attachment.

Methods: We could say that the literature, especially over the past 5 years mostly focused on this topics. The discussion paper provided a search of PubMed, CINAHL, and Ovid Medline. Search was conducted using the keywords of newborn, maternal and baby attachment, attachment , pediatric nursing ,nursing care to explore the attachment relating to factors that affect the attachment. Studies had to meet the following criteria to be included in this manuscript: (a) to be published between 2011 and 2017 and (b) to consist of newborn and maternal baby attachment. Exclusion criteria were as follows: (a) not published as a full article, (b) not published in English.

Results: One of the most important factors that positively affect the attachment process is the intention to breastfeed and breastfeed. İt's important to planned pregnancy, readiness to pregnancy, healthy progress of pregnancy to maternal-baby attachment. On the contrary, postpartum depression which is seen in the postpartum period, effect on maternal-baby attachment negatively. This relationship, which develops between the mother and the baby, continues to be effective throughout life, deeply affecting the child's physical, psychological and intellectual development. On the contrary, unhealthy or periodically interrupted forms of attachment lead to the development of personality, trust and attachment problems in the later stages of the child.

Conclusion: Research reviews showed that, attachment is important responsibilities for pediatric nurses who provide services to the mother and baby in the primary health care centers. Pediatric nurses are the most influential people in starting and maintaining a healthy maternal-baby attachment process within a family-centered care in a professional nursing approaches. Pediatric nurses closely follow current knowledge this subject and there is a need for more randomized controlled studies to improve the level of evidence of new nursing approaches.

ID: 287

Necrotizing Enterocolitisin Term Neonates: Identifying Risk Factors and Predictors of Severity

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Introduction: Necrotizing enterocolitis (NEC) is the most common and devastating gastrointestinal emergency in neonates. Although its incidence is inversely related to gestational age at birth, recently NEC is being more commonly recognized among term neonates, with an estimated incidence of 1 for every 20.000 births and 10% of all cases of NEC.

Purpose: To characterize the cases of NEC in term neonates in a Level III NICU and evaluate the determinants of severity.

Material and Methods: Retrospective study of all term neonates with 37 or more weeks of gestational age admitted at our NICU with the diagnosis of NEC according to Bell's criteria from 1 January 2002 to 31 December 2017.

Results: Thirty-one term neonates were diagnosed with NEC, corresponding to 18% of all NEC cases. The majority of newborns were male (64,5%); median gestational age was 39 weeks (37-41) and median birth weight was 2.78kg (1.72kg – 4.19kg); 25 (80.6%) neonates had underlying disease or possible risk factors for NEC. The median onset of the disease was the 3rd day of life. NEC classification was stage I – 5 (16%); stage II – 14 (45%) and stage III – 12 (39%). Surgery was required in 14 (45.2%) neonates. Transfusions (p=0.020) and use of vasopressors (p=0.012) were more common in stage III disease as well as low platelet count (p<0.001) and albumin levels (p=0.001), and high CRP levels (p=0.039). No statistical differences were found between enteral feeding and stage of NEC. Platelet count under 133.5x109/L had a sensitivity of 91.7% and a specificity of 84.2% for grade III NEC (AUC 0.925); albumin levels under 25.9g/L had a sensitivity of 83.3% and a specificity of 73.3% for grade III NEC (AUC 0.858) and CRP levels above 110.4mg/L had a sensitivity of 83.3% and specificity of 63.2% for grade III NEC (AUC 0.724). A multivariate analysis showed an association between platelet count and grade III NEC (OR=0.96 adjusted to albumin levels, CRP and transfusions; p=0.04; 95% CI 0.92-0.98). Overall survival rate was 77.4%.

Conclusion: In our study, we confirmed that the majority of patients had underlying disease or possible risk factors for the development of NEC. Predictors of severity are not well defined, particularly in term neonates. Our study suggests lower platelet count is associated with more severe disease. Successful efforts are needed to prevent NEC in term neonates and to identify those at higher risk for severe disease, mainly in those with known predisposing conditions.

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ID: 204

Neonatal Hypernatremia: A Year-Long Analysis

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Introduction: Neonatal hypernatremia is a potentially serious process that can lead to complications without early detection. While the reported incidence varies widely, studies indicate an incidence increase. Neonatal hypernatremia is generally associated with inadequate fluid intake, particularly due to insufficient lactation in breastfed neonates. Clinical signs and symptoms are often mild and non-specific which can prove difficult to identify.

Purpose: To determine the incidence of hypernatremia in our institution (which is a baby-friendly hospital) and assess its detection and management.

Materials and Methods: A retrospective study was performed in our institution between May 2016 and April 2017 which consisted in revising the charts of all newborns in whom serum sodium was determined for any reason, and selecting every case with a serum sodium level ≥150 mEq/L.

Results: During the study period, we observed 1926 live births, of whom 233 newborns were submitted to serum sodium determination. Thirty newborns were included in the study, of which 28 were detected in the postnatal care ward and 2 in the emergency room. The mean age was 3.3 ±0.9 days (range 2-6 days), mean birth weight was 3509 ±393g and mean weight loss was 11.6 ±1.5% (range 9.6-17.1%). 86.7% newborns were exclusively breastfed. 70% had primiparous mothers, with a mean age of 39.3 ±5.3 years. 46.7% were delivered by caesarean. All neonates lost over 7% of their birth weight, and 90% lost over 10%. Other signs and symptoms detected were: feeding difficulties (30%), perception of decreased urine output (16.7%), jaundice requiring phototherapy at time of diagnosis (13.3%), jaundice already in phototherapy (10%), and lethargy (6.7%). The mean serum sodium was 152.1 ±2.52mEq/L (range 150-158 mEq/L). In 76.7% of the cases, the correction of the hypernatremia was achieved with oral supplementation, with breast or formula milk, and the rest were treated with intravenous fluid. The mean decline of serum sodium levels in neonates treated with oral supplementation was 0.24mEq/L/h (range 0.09-0.34mEq/L/h). In the neonate group treated with intravenous fluids, the mean decline was 0.38mEq/L/h (range 0.13-0.6mEq/L/h). No complications or obits were registered.

Conclusion: We estimate a rate incidence of hypernatremia of 156 per 10 000 live births per year. Strategies such as daily weighing, careful medical examination, breastfeeding support in the ward and having the first medical evaluation at primary care in the first week of life allowed the early detection and management of these newborns.

ID: 157

Perinatal Factors that Affect on the Development of RDS in Late Preterm Infants

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Introduction: Late preterm infants (LPI) are immature from the point of view of physiology and metabolism. This fact postulates their predisposition to the development of perinatal pathology. Birth in late terms of pregnancy is often by means of Caesarean section (CS).

Aim: The aim is to determine the impact of mode of delivery on establishing of the respiratory adaptation of LPI with high perinatal risk.

Materials and Methods: 97 LPI with high perinatal risk were assessed by Coopland score depending on the mode of delivery and gestational age (GA) (34, 35, 36 weeks of pregnancy). Respiratory adaptation was specified according to the need in conduction of initial resuscitation assistance, scoring by Apgar, Downes and the clinical degree of respiratory disorders, and the necessity of oxygen supply and respiratory support.

Results, Description and Discussion: Course of neonatal period of LPI was characterized preferentially by the development of respiratory disorders, apnea, hyperbilirubinemia and hypoglycemia. More than half of infants (54,6%) had combined pathology. Respiratory disorders had 81,4% of LPI. Respiratory support (oxygen supply, nCPAP or ALV) was required in 50,5% of infants. Only oxygen supply received 27,8% of children, mainly between 34 and 35 weeks of gestation. Duration of oxygen therapy in LPI born at 34 weeks of GA was the longest – 7 (4,5-9,5) days, but statistically significant difference between cohorts was not revealed. 8,2% of LPI demanded respiratory support in nCPAP mode, infants born at 36 weeks of GA (17,6%) dominated over them (p=0,010). 30,9% of LPI required invasive mechanical ventilation in equal quantity from all cohorts. The duration of the respiratory support was the longest in infants born at 34 weeks of GA – 9 (3-19) days, it was 5 (3-7) days in those born at 35 weeks and it was 6 (3-9) days in infants born at 36 weeks of GA. The assessment of risk factors revealed the greatest impact of recurrent miscarriage in different terms of GA, preeclampsia, intrauterine infection, placental dysfunction and IUGR on the development of respiratory disorders (positive close correlation). Antenatal steroids were obtained only by 3 of pregnant at the GA of 34 weeks. More often the CS was provided at the 36 weeks GA due to the acute fetuses distress or progressive intrauterine hypoxia on the background of placental dysfunction, which was more connected with the development of respiratory distress than CS. Among all of LPI born due to urgent CS, 53,8% were in need of respiratory support however the indication for the Cs was the state of fetus. The most common indication of the elective CS was premature placental abruption. Among this cohort infants of 34 weeks of GA dominated without the increasing of occurrence of respiratory disorders despite less GA.

Conclusion: LPI with high perinatal risk regardless of GA equally often have respiratory disorders and need of careful monitoring and respiratory support. Frequency of the development and severity flow of respiratory distress depend on the perinatal background of the fetus development rather than on the method of delivery.

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ID: 222

Rate of Premature Newborns in General Hospital Kumanovo During the Period 2014-2017

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Introduction: Thorough pregnancy monitoring and management and increased correlation between primary and secondary health care providers leads to decreasing trend of premature newborns within General Hospital Kumanovo.

Purpose: To present the trend of preterm born newborns during the period of four years (2014-2017) in General Hospital Kumanovo; to present the gestational age of premature newborns.

Material and Methods: For this retrospective study data was collected from the annual reports of the department and medical histories of newborns. Statistical analysis includes estimation of rate of prematurity for each year of the investigated period, creation of linear trend and selection of newborns according the gestational age.

Results: In 2014, out of 1579 newborns, 28 (1.77%) were premature. In 2015, out of 1401 newborns, 22 (1.57%) were premature. In 2016, out of 1393 newborns, 21 (1.50%) were born before the full 37 weeks. Within the year 2017, they were 16 premature newborns out of 1377 (1.16%). Newborns are grouped according to gestational age into three groups (from 26.0 to 27.6 GW from 28.0 to 33.6 GW and 34.0 GW to 36.6).

Conclusion: there is a trend of discreet decrease of the rate of premature newborns, mostly in the group of newborns with gestational age from 34,0 to 36,6 GW which is consistent with the improved level of health care provision within the General Hospital Kumanovo.

ID: 135

Health Literacy Level of Mothers and Rational Use of Antibiotics in Children

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Background and Aims: Mothers are responsible for the effective management of medication and children's health care. The aim of this study is to determine the relationship between the level of health literacy and the rational use of antibiotic for mothers with children aged 1 month- 6 years.

Methods: The study was a descriptive, cross-sectional and correlational design. The study was conducted between on January-May 2018 on a total of 121 mothers with children who are treated at the pediatric outpatient clinics of a medical faculty hospital in Turkey. Data were collected using the Questionnaire Form and Health Literacy Scale. The data was analyzed percent, mean, standard deviation, Spearman Correlation.

Results: The average age of the mothers is 31.20±5.81. 84.3% of children are between 1 and 6 years of age. Children have become sick 3.14±2.91 times and they used antibiotics 2.79±2.64 times within one year. 46.3% of the mothers prescribe medication to their children without illness, and it is stated that the majority of these medication analgesics / antipyretics. 82.6% of mothers did not know use rational of antibiotics. Mean score of health literacy level was 100.85±17.64. There was no significant relationship between the health literacy level and knowing use rational of antibiotic (r=-0.55 p=0.549). There was a strong and significant relationship between antibiotic use and be sick status in one year (r = 0.64 p <0.001).

Conclusions: It has been determined that there was no relationship between health literacy and knowing the rational use of antibiotics.

ID: 115

Myeloid Sarcoma Presenting as Irritability and Mild Proptosis in a 6-Month Infant: A Case Report

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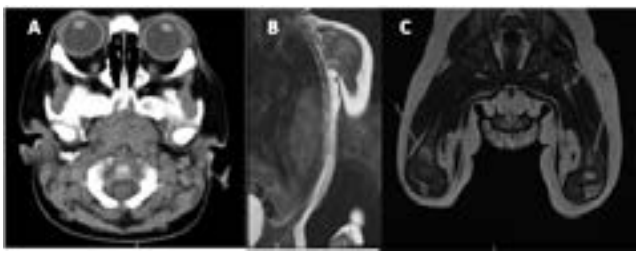
Introduction: Clinical presentation of myeloid sarcoma (MS) is diverse, which makes the diagnosis a real challenge. We report the case of a patient with MS presenting as irritability and mild proptosis without initial bone marrow involvement which appeared ten days after the first bone marrow was performed.

Purpose: Exemplify the importance of a complete clinical evaluation in a patient with irritability as the only manifestation of cancer.



Case Report: A previously healthy 6-month-old infant presented with a 12-day history of hyporexia, progressive irritability and fever. On examination he was well-appearing, a mild right proptosis was present, no enlarged lymph nodes neither hepatosplenomegaly or abdominal mass were found. Initial laboratory workup revealed: hemoglobin 10.8 g/dL, platelet count 412x103/µL, white blood cells 10.8x103/µL with 42% neutrophils, 48% lymphocytes, 3% atypical lymphocytes, and an elevated lactate dehydrogenase of 983 U/L. Initial workup for osteomyelitis was performed , with a Technetium Tc 99m medronate bone scanning showing hypercaptation areas at the left proximal humeral and femoral metaphysis, suggestive of malignancy. A whole-body MRI showed involvement of maxillary sinus with orbital extension, multiple medullar lesions at the left humeral diaphysis, and both femoral and tibial diaphysis (Fig 1).

A bone marrow aspiration showed no blast cells, but suggestive neuroblastoma cells were found by immunophenotyping (strong expression of CD56). Following neuroblastoma workup, a bilateral bone marrow aspiration and biopsy were performed, showing diffuse monoblastic cell infiltration, positive for myeloperoxidase and CD56. Cerebrospinal fluid (CSF) cytology and cytochemistry showed no malignant cells. The patient was diagnosed with MS of the maxillary sinus with orbital extension, bone marrow involvement, and bone and soft tissue infiltration. Treatment

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was initiated with ADE (Cytarabine, Daunorubicin, Etoposide), and triple intrathecal chemoprophylaxis. He underwent remission after his first cycle of induction chemotherapy and remains so 4 months after the 5th chemotherapy cycle.

Conclusion: The clinical presentation of this patient represents a diagnostic challenge, considering that there were no specific clinical signs and symptoms. These cases require a meticulous diagnostic evaluation to initiate the treatment as soon as possible, considering that patients with bone marrow involvement have a poor prognosis.

ID: 187

Paediatric Registrar Review Clinic: Improving Efficiency and Attendance

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Introduction: A quality improvement project was undertaken within a district general hospital's paediatric department focussing on improving the efficiency and attendance rate of the Paediatric Registrar Review Clinic (RRC). Identified issues were high 'did not attend' (DNA) rate, inadequate referral information and inappropriate utilisation of the clinic. This resulted in either patients missing their review or attending when a more appropriate follow-up method was preferable, registrars challenged to efficiently run clinics without pertinent clinical information and ineffective utilisation of the department's clinic time. Data were collected through retrospective audit by registrars of nine consecutive RRC (November 2016 to January 2017) and included: number of patients booked, DNA, presence of referral information and feasibility for alternative follow-up.

Results: The results (tabulated below) highlight high DNA, poor documentation of clinical problem and reason for review, and scope for alternative follow up suggesting inefficient use of clinic time. In response, four interventions were implemented: 1. RRC guide listing best practices for referring. 2. RRC appointment letter: reformatted explanation to families of clinic details, location and how to change appointments. 3. RRC booking form: reformatted with adequate space for required referral information. 4. Administrative changes: a. Enable ward clerks to rearrange clinic appointments. b. Automated text message reminder one week prior to clinic. A repeat RRC audit of clinics (October 2017 to March 2018) was performed to measure the intervention's impact. Data collection methods were identical. Microsoft Excel was used for analysis by descriptive statistics for comparison between audits.

	Before intervention	After intervention
Clinics	9	11
Patient bookings	69	63
Clinic problem documented	56/69 (80%)	57/63 (90%)
Reason for RRC review or proposed plan documented	31/69 (45%)	55/63 (87%)
Did not attend	25 (36%)	8 (13%)
Alternative follow-up	43 (62%)	29 (46%)

The significant improvement in referral clinical details, decreased DNA rates and overall suitability of follow up method allowed more effective clinic preparation and clinical review by registrars and improved resource utilisation. This resulted from simple interventions without significant reorganisation of a clinical system. Successful development of a clinical system change requires involvement from the whole department to best understand challenges from different perspectives.

ID: 223

Precision Entails Perfection: Blood Forms Completion - Where Are We Now?

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Introduction: In Temple Street Children's University Hospital, we care for more than 150,000 children per year, leading to the Phlebotomy Department receiving numerous blood forms each day. Blood form requests are an essential component of patient care. They must contain the proper information in order for the specimen to be processed. There is raised concern regarding multiple forms not being correctly completed. This leads to unnecessary added workload for both phlebotomists and medical team members. In some occasions, it leads to unnecessary repeat courses of venepuncture on a child.

Purpose: To raise awareness among medical staff regarding the importance of accuracy in filling out blood form requests. To evaluate the current performance compared to predefined criteria set by the Irish local Health Department. To implement the use of the 'plan, do, study, act' (PDSA) model to improve the current situation in our hospital.

Methods: This is a 4-week prospective study during which data is collected on a daily basis to evaluate the current performance of accuracy. During the end of the 2nd week, data was evaluated and action was taken. A medical student made a verbal announcement during Grand Rounds, creating awareness on this audit and highlighting the most commonly omitted components on the blood forms for the previous 2 weeks. Reminders were sent out to medical doctors from all specialties on group chats to inform those who may have been absent at Grand Rounds. Data was again evaluated during the 4th week. All data was anonymised, collated and analysed on Excel.

Results: During the 4 weeks period, a total of 238 venipunctures were performed. During the first two weeks, 38/116 (32.65%) forms were not filled out correctly. During the 3rd and 4th week, post verbal action taken, there was a total of 39/122 (31.65%) forms not filled out correctly. The two most commonly omitted components were biography sticker details on the forms and adequate number of stickers for blood bottle samples.

Conclusion: Despite action being taken, there has been no improvement. Leaving out biography sticker details on forms as well as not putting sufficient stickers for blood bottle samples are serious omissions. During the next PDSA cycle we plan to design screen savers for hospital computers to create a stronger visual prompt, as well as a laminated card-size checklist reminder to be distributed to all medical staff.

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ID: 131

Progressive Chronic Kidney Disease as a Complication of Neurogenic Bladder in Spina Bifida: a Case Report

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Introduction: Spina bifida is the most common cause of neurogenic bladder in children that may lead to progressive chronic kidney disease (CKD). Early diagnosis and prompt treatment can preserve kidney function.

Purpose: To raise awareness and highlight the importance of early diagnosis, management and referral of neurogenic bladder children with spina bifida to prevent renal damage and progressive CKD.

Case Report: We present a case of an 11 year old girl, who had a lumbar lump since birth. At 8 months old, she went a surgical lump removal with no further treatment. Since two years of age, she had trouble with toilet training and was diaper dependent. Since six years old, she often experienced recurrent abdominal pain, vomiting, fever, and regularly visited several doctors. Although she has spina bifida with those complaints, the previous doctors never suspected renal disease. At 11 years of age, she came to the hospital with uremic encephalopathy, severe anemia (Hb 3,5 g/dL), proteinuria, underweight and stunted, and CKD stage V (GFR 13,4 mL/minute/1,73m2). A renal ultrasound and voiding cystourethrogram (VCUG) revealed bilateral hydronephrosis grade IV, hydroureter and left vesicoureteral reflux grade IV. These concluded the diagnosis of neurogenic bladder due to spina bifida in this patient. After 7 days of hospitalization and received one episode of hemodialysis, she was discharged, and started using clean intermittent catheterization (CIC) and conservative treatment. However, late diagnosis, management and referral has led her to stage V of CKD.

Conclusion: In a child with history of having a lumbar lump and recurrent urinary tract infections (UTIs), awareness is crucial to prevent renal damage and progressive CKD.

ID: 227

Strengthening of Health Care Capacities to Improve Early Childhood Development in Serbia - Results and Plans

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Introduction: The National Program for Early Childhood Development Promotion (NECDP), adopted by the Serbian Government in March 2016, highlights the health care system – most notably its primary level – as the point of access to and coordination of multi-sector early intervention measures, designed to support families and children in the first years of life. Supported by the Ministry of Health and UNICEF, over the past seven years, the Pediatric Association (PAS) has undertaken a mission to spread ideas, strengthen the capacities of all primary care pediatricians and medical staff teams working in Development Counselling Centers (DCC) in Serbia by delivering training programs, equipping the premises, strengthening partner relationships with the parents and linking with other community-based systems.

Purpose: To present the results of seven years implementation of the projects aimed to health system capacities building for ECD, conducted by PAS and UNICEF, with support of MoH and partners.

Materials and Methods: Analysis of the results using reports of coordinators, statistical analysis of input-output tests of knowledge and satisfaction of course participants, as well as analysis of additional activities in the application of lessons learned in the courses.

Results: Training has been organised separately for pediatricians (84 sessions, 17 interactive courses) and for DCC teams (68 sessions, 14 interactive courses), including in the use of child developmental screening and assessment tools (ASQ, GMCD). More than 160 pediatricians from 24 primary health centres have been trained, which has increased their capacities for early detection of developmental delays and disabilities (pediatricians' knowledge level increased by 33%). Putting theory into practice, the tools have been used for assessing the development of more than 7000 children. Suspected delays have been identified in 33% of the children, who have been referred to DCCs or sub-specialists, or to other specialized institutions. Parents have received more than 12,000 leaflets with age-specific games stimulating child development.

Conclusion: Our practical experience has determined our next step – ASQ tool standardization, which is underway. Introduction and use of ASQ-3 for parents in the everyday pediatric practice in preschool dispensaries and training of all pediatricians to apply this questionnaire will provide an easy way to early detect children who may have delays and who need help. In the upcoming time, the involvement of the PAS in implementation of the NECDP at all levels is planned.

ID: 111

The Role of Neutrophil-lymphocyte Ratio and Mean Platelet Volume in Diagnostics and Prediction of Bacteremia in Pediatric Emergency Department Settings

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Background: Bacteremia and sepsis are the leading cause of death in children worldwide. Early recognition and timely treatment are essential for preventing progression to more severe forms and lethal outcomes. CRP and Complete Blood Count (CBC) are initially preferred tests to distinguish between bacterial and viral infections. Specific early markers are still missing.

Aim: To investigate the diagnostic value of NLR (neutrophil-lymphocyte ratio), PLR (platelet-lymphocyte ratio) and MPV (mean platelet volume) for differentiation between bacterial and viral infections. Moreover, applying cut-off levels of inflammatory markers we aimed to develop a prediction model to distinguish between severe bacterial infection and viral infection.

Methods: Children (n=115) presented with fever to emergency department (ED) were retrospectively enrolled into study and divided into two groups: sepsis/bacteremia (n=68) and viral infection (n=47) patients. Children with chronic diseases, late arrival (>48 hours) to ED or recent antibiotic therapy were not enrolled. Sepsis/bacteremia has been proven by typical clinical symptoms and positive blood culture. Viral infection group was composed of clear acute upper respiratory tract viral infection cases. For all study participants blood has been

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drawn and CBC as well as inflammatory markers such as C-reactive protein (CRP) level were assessed at the presentation. Additionally, NLR and PLR have been calculated. Data analysis was performed using SPSS Statistics version 21.0. P value of <0.05 was considered significant.

Results: There was no significant difference in children age or gender between sepsis/bacteremia and viral infection groups (9 [3-24] months vs. 12 [6-27] months, p = 0.274 for age; 31 (45.6%) vs. 23 (48.9%), p = 0.857 for gender). Not surprisingly, sepsis/bacteremia participants demonstrated significantly higher white blood cells (WBC) (17.94 ± 10.04 × 109/l vs. 10.42 ± 4.21 × 109/l, p < 0.001) and neutrophils count (10.93 ± 8.03 × 109/l vs. 5.08 ± 3.42 × 109/l, p < 0.001), as well as CRP level (88.92 ± 83.05 mg/l vs. 13.95 ± 16.06 mg/l, p < 0.001). Moreover, sepsis/bacteremia patients had relevant increase in absolute platelets count (370.15 ± 134.65 × 109/l vs. 288.91 ± 107.14 × 109/l, p = 0.001) and NLR (2.69 ± 2.03 vs. 1.83 ± 1.70, p = 0.006). NLR and MPV were significantly lower in infants (≤ 12 months) of viral infection group when they arrived at the ED late (>12 hours) after the onset of symptoms compared with sepsis/bacteremia group (1.16 ± 1.06 vs. 1.90 ± 1.25, p = 0.025 for NLR and 8.94 ± 0.95 fl vs. 9.44 vs. 0.85 fl, p = 0.046 for MPV). Of the other inflammatory biomarkers, NLR with a calculated threshold of 1.58 showed sensitivity and specificity of 73% and 58%, respectively, and an area under the curve (AUC) of 0.75 (95% CI, 0.65 to 0.84) for NLR to identify children with sepsis/bacteremia.

Conclusion: NLR and MPV could be used in clinical practice and allow distinguishing between bacterial and viral diseases and predict bacteremia among infants up to 1 year but only if arrived later than 12 hours.

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Urachal Anomalies – Case Report and Literature Review

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Introduction: Urachal anomalies are congenital malformations that can either be found incidentally on an abdominal imaging exam or present themselves with a wide range of symptoms. Their treatment is currently subject to a lot of controversy.

Purpose: We present a short case report that serves as introduction to a recent literature review. Although infrequent, these malformations are still important differential diagnosis when investigating abdominal or pelvic symptoms.

Case Report / Materials and Methods: A previously healthy 8-year-old boy entered the Emergency Services with complaints of a severe hypogastric pain in the previous 24 hours. He had no other symptoms or findings on physical examination. An US (ultra-sound) was requested and revealed inflammatory signs in a previously unknown vesicourachal diverticulum as the cause for the complaints. The patient had normal urine and blood tests and after the pain resolved under ibuprofen he was discharged. The symptoms remitted after 3 days and he remains asymptomatic after several months of follow up.This case report shows how even the most rarely detected urachal remnant can present with apparently common symptoms and how these should be considered in certain clinical settings. It also exemplifies the doubt that can arise when treating asymptomatic patients. The literature review was based on articles published on the last 10 years available on PubMed.

Results: The urachus is a tube-shaped embryological structure that extends from the umbilicus to the bladder. Its anomalies arise from a failure in the obliteration of its lumen and can be divided in 4 categories: Patent urachus – patent connection between the umbilicus and the bladder; Umbilical-urachal sinus – blind focal dilation at the umbilical end; Vesicourachal diverticulum – focal outpouching at the vesical end; Urachal cyst – fluid-filled dilation with no communication with either end. They usually manifest due to infection or other complications, presenting with a wide variety of symptoms and US imaging is very effective in their diagnosis. Those complications (and the risk of malignancy) led to a traditionally surgical approach – however, many authors nowadays defend that excision may not always be necessary, particularly in young patients and the ones that are asymptomatic.

Conclusions: Urachal anomalies are more frequent than previously thought. They can present with a wide range of clinical scenarios, some of which as simple as an acute abdominal pain (as in our case report) and can frequently be diagnosed with an US. There has been a recent paradigm change concerning their management.

ID: 108

Effectiveness of a School-based Intervention on Teacher Confidence in Asthma Management.

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Introduction: Children spend nearly half of their day in school under the supervision of teachers. However, studies show that many teachers lack confidence in student asthma management.

Purpose: The objective of this study was to evaluate the effectiveness of an educational workshop on school teachers' confidence in asthma management.

Materials and Methods: We conducted an intervention study of classroom teachers from four schools in the Bronx, NY. Teachers completed a 20-item questionnaire evaluating confidence in school asthma management before and after a 45-minute workshop delivered by a community health worker. The workshop reviewed asthma symptoms, triggers, and management of acute attacks as per national guidelines. We asked teachers about confidence managing students with asthma, including symptom recognition, trigger avoidance, assisting with medications, communicating with parents, encouraging participation in activity, and responding to emergencies. Teachers rated their confidence on a Likert scale (5=completely sure, 1=not at all sure). McNemar test was used to compare pre/post responses.

Results: A total of 64/70 (91%) teachers completed pre/post surveys (mean age 39.7 yrs; mean years of experience 8.0 yrs). Fewer teachers reported feeling worried if a student developed an asthma attack in the classroom post-intervention compared to pre-intervention (24.6% vs 42.9%, p=0.012). Post-intervention, teachers were more confident on 8 out of 10 asthma management items.

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Table: Teacher confidence in asthma management.

Survey Item	Pre-test %	Post-test %	P value
1. Ensuring recognition of asthma symptoms	32.8	64.1	<.0001
2. Ensuring avoidance of asthma triggers in the classroom	30.6	54.8	0.003
3. Assisting children with avoidance /exposure to triggers	29.7	57.8	0.001
4. Ensuring participation of students with asthma in physical activity.	59.4	76.6	0.013
5. Assisting students with taking their asthma inhaler	42.9	61.9	0.023
6. Ensuring immediate access to asthma inhaler in school	30.6	40.3	0.286
7. Evaluating student's need to take asthma inhaler	35.9	60.9	0.002
8. Effective communication with parents about child's asthma	51.6	64.1	0.152
9. Getting immediate medical care for a student in severe distress	71.9	85.9	0.035
10. Effectively working with nurse and physical education teacher to support students with asthma	65.6	79.7	0.022

Conclusion: A brief asthma workshop incorporating national guidelines on school asthma management improved teacher confidence in managing asthma. Developing a sustainable model of annual asthma workshop delivery for school personnel may improve their confidence in assisting with asthma management for students.

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The Problem of Abnormal Body Weight in Children From the Point of View of a School Nurse

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Introduction: Obesity has been recognized by the World Health Organization as an epidemic of the 21st century. Over the past four decades, the prevalence of obesity has tripled. Considered a problem of high income countries, overweight and obesity is also currently developing in the medium and low-income regions of the world. Excess weight can cause the disorder of many systems in the human body. A large role in this area belongs to the Health Care staff - PHC doctor, but especially to the school nurse, necessarily in cooperation with the educators and parents of students.

Purpose: The aim of the study was to estimate the incidence of abnormal body weight in girls and boys in pre-school and school age and in determining the age at which the greatest risk of developing excessive body weight in each sex is observed.

Materials and Methods: The study was attended by a total of 6589 children aged 4-12 from Tarnów kindergartens and primary schools, including 3385 boys and 3204 girls. Evaluation of nutritional status was made using anthropometric measurements - height, body weight and body mass index - BMI. The research was carried out in 2014-2017.

Results: The majority of respondents in Tarnów had a correct BMI index. Excessive body weight affects over 19% of Tarnów children, more often boys, and nearly 30% of them are already obese. Overweight is about 14% of girls and 13% of boys, while obese is respectively: about 5% of girls and 7% of boys. The largest percentage of children with overweight or obesity is a group of 9-year-olds. In this age, too much weight to body height ratio is more than every third child. Underweight is compared to the occurrence of overweight. It is observed more often in girls aged 4 years. Boys 4-7 years old have a higher body mass compared to girls. Apart from 5-year-olds, the differences show statistical significance.

Conclusions: In the development of excessive body weight in children, the age at which children start primary school is crucial. Perhaps it is a time when one should conduct more intensive education, especially when children start to make independent nutrition decisions. The school nurse's role would also be a relatively frequent monitoring of weight gain in children from grades I-III.

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NOTES

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