

Uveitis in a Multicenter Pediatric Inflammatory Bowel Disease Population: Results from the ImproveCareNow Network



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Introduction

- Uveitis is an uncommon but serious complication thought to occur in between 2-9% of patients with inflammatory bowel disease (IBD) and can result in blindness without intervention.
- Compared to other rheumatologic conditions, uveitis that develops as an extra-intestinal manifestation of IBD may occur in the absence of gastrointestinal symptoms.
- Most of the literature on uveitis and IBD focuses on adults.
- The purpose of this retrospective chart review of the Improve Care Now (ICN) database is to identify the prevalence of uveitis in pediatric IBD patients and risk factors for developing uveitis in this population in order to develop more specific screening guidelines.

Methods

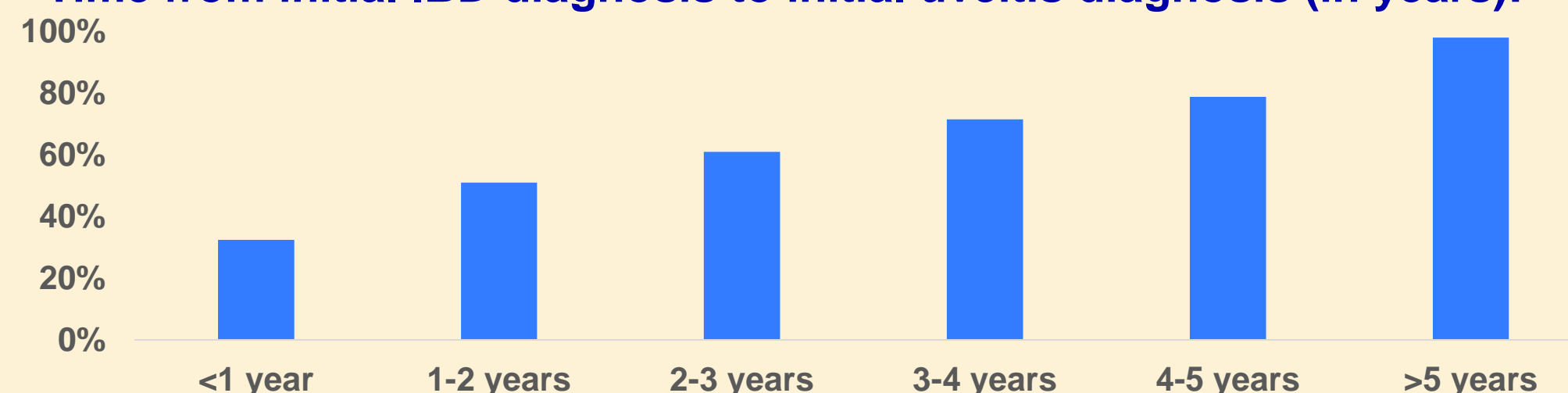
- The ICN was interrogated for all patients that had uveitis recorded as “yes” or “no” at least once from 2006-2016; yielding a sample size of 17,587 patients .
- Data was collected on both uveitis and non-uveitis patients regarding demographics, disease type/location, and presence of other extra-intestinal manifestations (EIMs).
- For the uveitis population, data was also collected on disease activity and medication use at time of uveitis diagnosis.

Results

Uveitis vs. non-uveitis patients; demographic comparison:

		Uveitis	No Uveitis	p-value
Mean age at IBD Diagnosis (Year)		11.2	12.0	0.023
Gender	Male	42%	56%	0.001
	Female	58%	44%	
Race	Asian	3%	2%	0.69
	Black / African American	15%	11%	
	White	80%	83%	
	Multiracial	1%	1%	
	Other	1%	2%	
Diagnosis	Crohn's	70%	65%	0.34
	UC	24%	29%	
	Indeterminate Colitis	7%	7%	
Crohn's Disease Phenotype	Inflammatory only	85%	80%	0.90
	Stricturing	6%	7%	
	Penetrating	5%	6%	
	Stricturing and Penetrating	1%	2%	
UC Extent of Disease	Ulcerative Proctitis	4%	8%	0.10
	Left-sided UC	24%	20%	
	Extensive UC	7%	10%	
	Pancolitis	52%	59%	

Time from initial IBD diagnosis to initial uveitis diagnosis (in years):



The mean time between IBD diagnosis and uveitis diagnosis was 3.0 years; with 31% of patients diagnosed within their first year after IBD diagnosis

Percent of patients who report ever having experienced the following EIMs:

	Uveitis +	Uveitis -
Fever	20%	5%
Arthritis	42%	8%
Erythema Nodosum	2%	1%
Pyoderma Gangrenosum	19%	0.5%

Uveitis patients were more likely to have experienced each of the four extra-intestinal manifestations ($p < 0.05$)

Conclusions

- Uveitis is rare in the pediatric IBD population and the overall prevalence in our study was 0.87%
- All pediatric IBD patients should be screened for uveitis within a year of IBD diagnosis
- Patients who are initially negative will need repeated screening exams as less than a third of patients who go on to develop uveitis are diagnosed in the first year
- Patient subpopulations found to be at higher risk of developing uveitis; such as female patients or patients who have a history of fever, arthritis, erythema nodosum, or pyoderma gangrenosum merit at least annual screening
- The diagnosis of uveitis did not correlate with disease activity, nutritional status, PCDAI/PUDAI score, or physician global assessment; therefore clinicians should keep the risk of uveitis in mind, even for patients who are otherwise clinically well.