More Than Just Gut Feelings: A Case of IBD with Extraintestinal Plot Twists

Shivani Patel, DO
LSUHSC – New Orleans

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Children's Hospital New Orleans LCMC Health

Disclosure

Speaker: Shivani Patel, DO – Nothing to disclose

Learning Objectives

- Refresh basic knowledge of IBD
- Recognize the signs and symptoms of extra-intestinal manifestations of IBD
- Be familiar with the role of the PCP in identifying and supporting IBD patients

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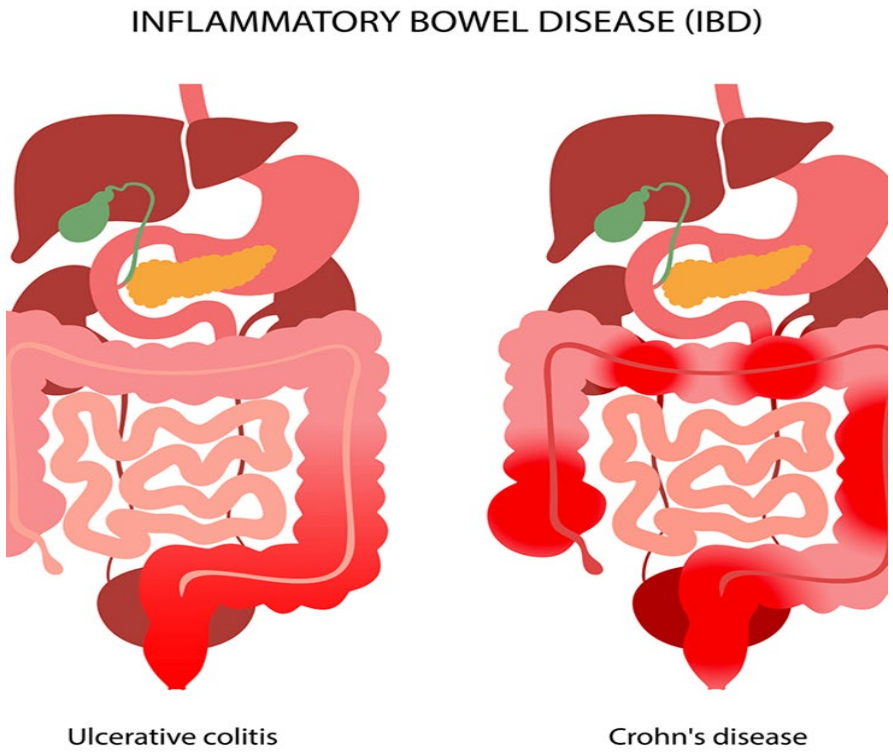
Inflammatory Bowel Disease



- Group of conditions characterized by recurrent inflammation of the intestine
- Age of presentation is commonly between 10-20 years of age
- Microbial, genetic and environmental influences play a role

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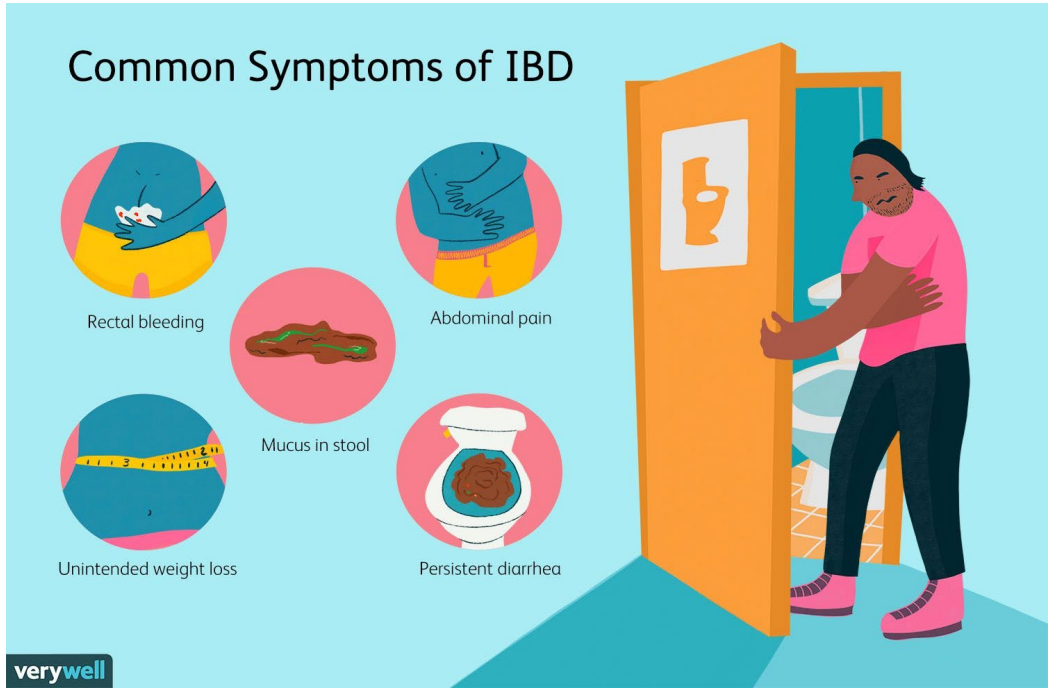
Classification

	Crohn's Disease	Ulcerative Colitis
Location	Any portion of the GI tract; most common in the terminal ileum and colon	Colonic inflammation starting in the rectum and progressing proximally
Lesions	Patchy "Skip Lesions"	Continuous
Morphology	Noncaseating Granulomas	Crypt abscess and ulcers
Complications	Fistulas, Strictures, Perianal disease	Fulminant Colitis, Toxic Megacolon, Perforation

Intestinal Symptoms

- Bloody diarrhea
- Watery/Mucus diarrhea
- Chronic Abdominal pain
- Nocturnal Defecations
- Fever
- Growth failure



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Case Presentation

- J is a 11-year-old girl who presented to OSH with bloody diarrhea and abdominal pain for the past three weeks
- Pain is intermittent and cyclical
- Denies nausea, emesis, weakness, or visual changes
- No recent travel history

Physical Exam

- Vitals: HR 132 BP: 102/56 Temp: 99.7 F
- General: pale, ill-appearing
- HEENT: No erythema, exudate, or lesions
- CV: RRR, + murmur
- Abdominal: + generalized abdominal tenderness
- Skin: Capillary refill delayed to 2-3 seconds

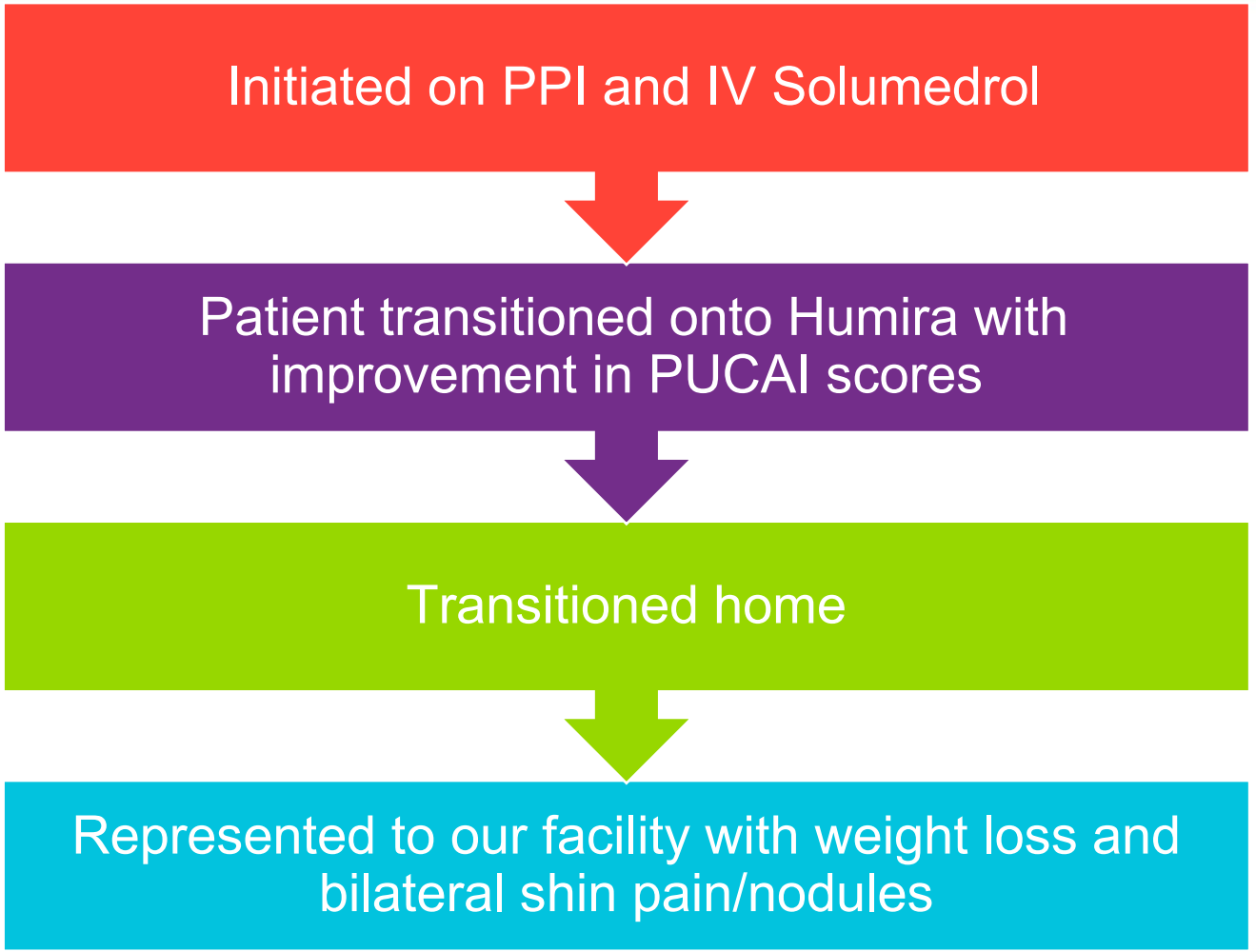
Laboratory Results

- CBC: Hbg 8.9 gm/dL (10.2-14.1 gm/dl)
- CMP: No abnormalities
- CRP: 6.3 g/dl (0.4-1 g/dl)
- ESR: 75 mm/hr (0-20 mm/hr)
- GI panel: + EPEC

Hospital Course

- Admitted with the intention for monitoring and plan for EGD/Colonoscopy
- EPEC treated with Azithromycin
- Scope was notable for ulceration and erythema concentrated from the transverse colon to the rectosigmoid colon which was thought to be consistent with Ulcerative Colitis.

Hospital Course



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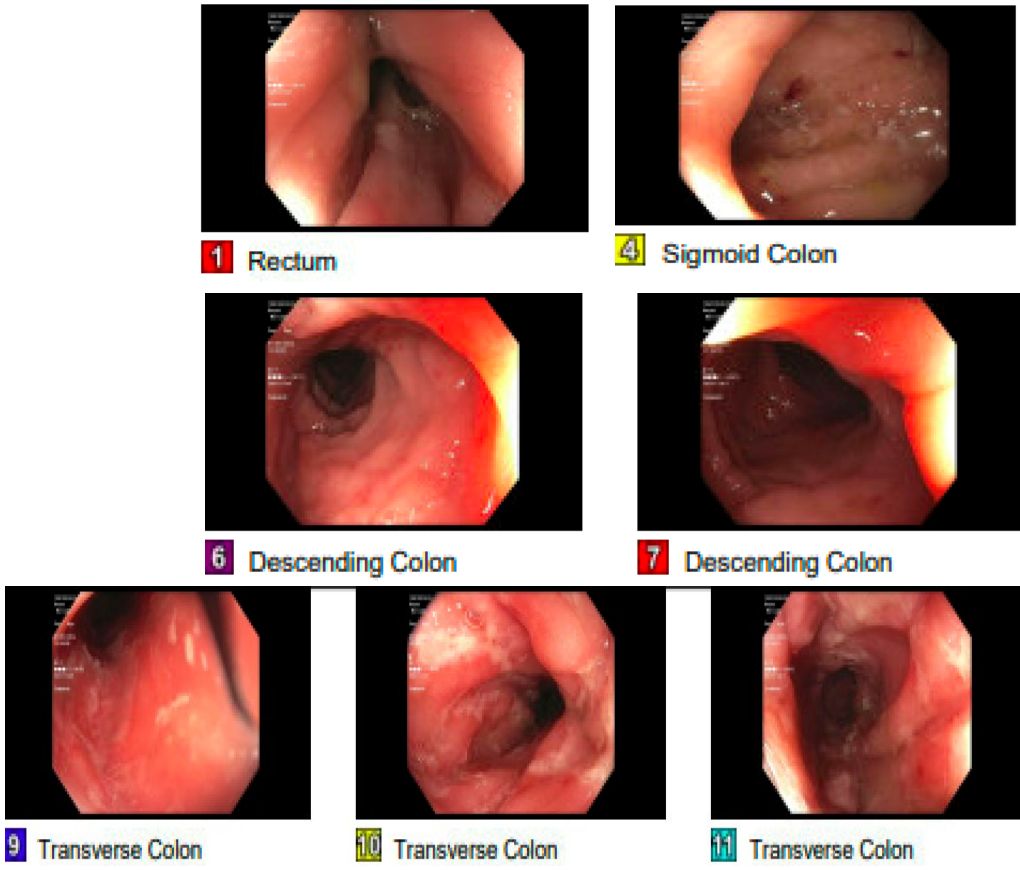
Course Continued

- Physical exam was notable for 2x2 cm nodule with overlying erythema and small shallow ulcers in the oral mucosa
- Work up with notable for leukocytosis and elevated inflammatory markers
- Patient was admitted due to concern for acute flare
- EGD/Colonoscopy notable for ulcerated mucosa from the rectum to the transverse colon
- Patient transitioned to Infliximab



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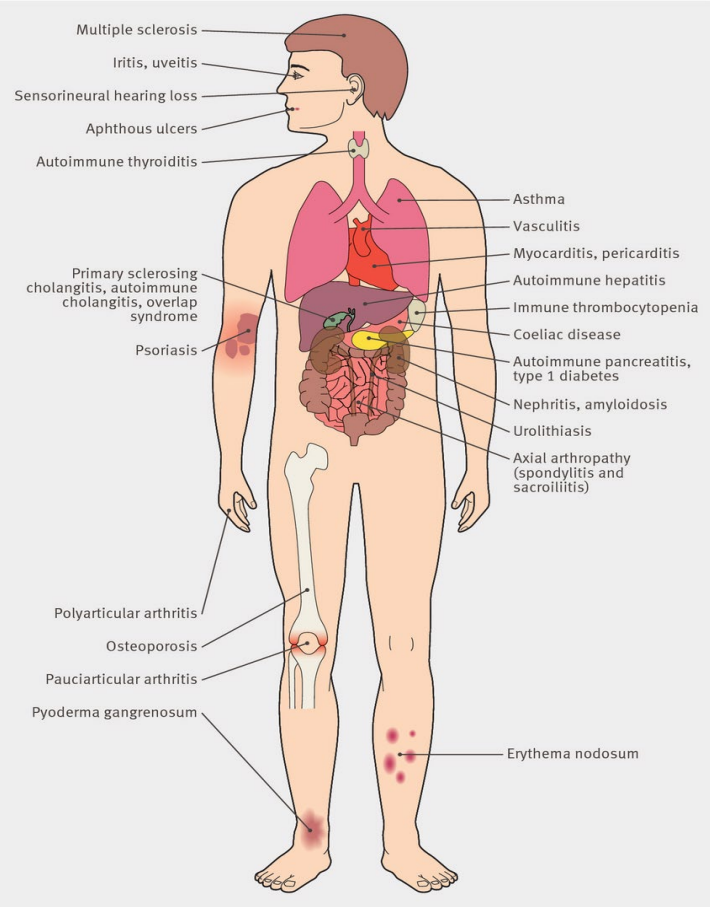
Extra Intestinal Manifestations (EIM)

- EIMs are common in both Ulcerative Colitis and Crohn's Disease
  - Can involve almost any organ system
- Present in 25-40% of patients
  - 25% of IBD patients develop more than 1 EIM
  - The development of 1 EIM increases the risk of developing a second EIM
- Can develop prior to colonic symptoms



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Extra Intestinal Manifestations (EIM)

Extraintestinal manifestations of inflammatory bowel disease

Common extraintestinal manifestations
Musculoskeletal
Arthritis – Colitic type, ankylosing spondylitis, isolated joint involvement such as sacroiliitis.
Hypertrophic osteoarthropathy – Clubbing, periostitis, metastatic Crohn disease.
Miscellaneous – Osteoporosis, aseptic necrosis, polymyositis, osteomalacia.
Skin and mouth
Reactive lesions – Erythema nodosum, pyoderma gangrenosum, aphthous ulcers, vesiculopustular eruption, cutaneous vasculitis, neutrophilic dermatosis, metastatic Crohn disease, epidermolysis bullosa acquisita.
Specific lesions – Fissures and fistulas, oral Crohn disease, drug rashes.
Nutritional deficiency – Acrodermatitis enteropathica (zinc), purpura (vitamins C and K), glossitis (vitamin B), hair loss and brittle nail (protein).
Associated diseases – Vitiligo, psoriasis, amyloidosis, epidermolysis bullosa acquisita.
Hepatobiliary
Specific complications – Sclerosing cholangitis (large-duct or small-duct), bile duct carcinoma, cholelithiasis.
Associated inflammation – Autoimmune chronic active hepatitis, pericholangitis, portal fibrosis and cirrhosis, granuloma in Crohn disease.
Metabolic – Fatty liver, gallstones associated with ileal Crohn disease.
Ocular
Uveitis iritis, episcleritis, scleromalacia, corneal ulcers, retinal vascular disease, retrobulbar neuritis, Crohn keratopathy.
Metabolic
Growth retardation in children and adolescents, delayed sexual maturation.

Et. Al. Higuchi

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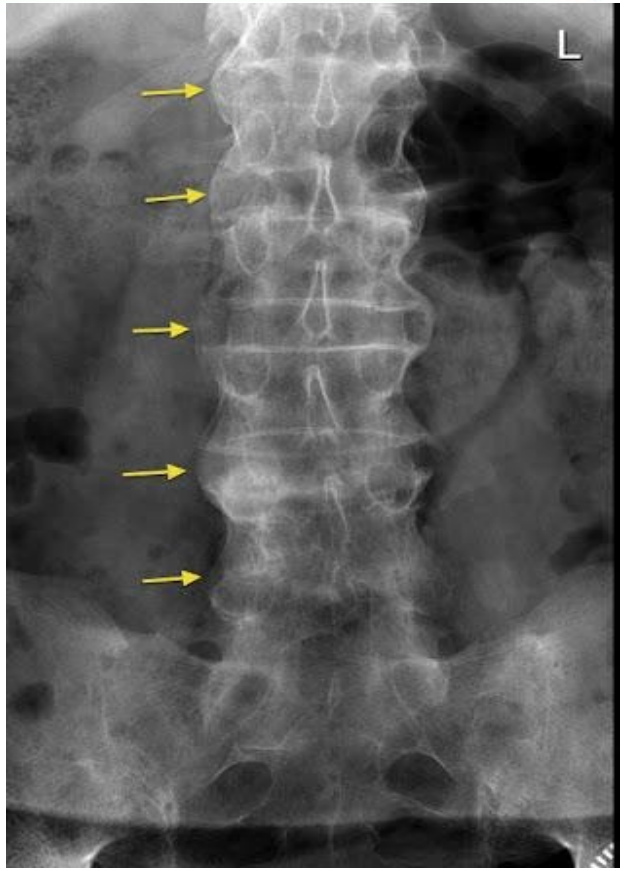
Musculoskeletal

- Present in 9-53% of patients
- Arthralgias
  - Most common
- IBD-related Arthritis
  - Asymmetric and often Polyarticular
- Ankylosing Spondylitis
  - Back/Buttock Pain
- Enthesitis
- Osteoporosis



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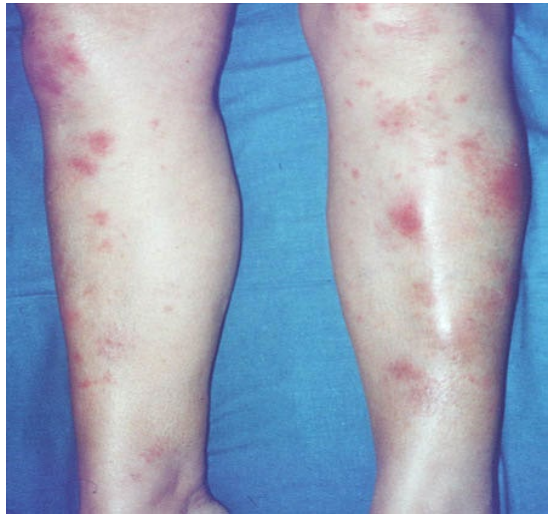
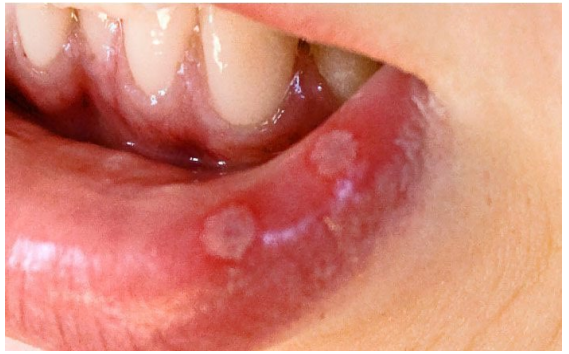
Dermatologic/Mucocutaneous

- Present in 5-15% of patients
- Erythema Nodosum
  - Warm, erythematous, tender nodules ranging from 1-5 cm in diameter
  - Often correlates with intestinal disease activity
- Aphthous stomatitis
  - Mimics canker sores
- Pyoderma Gangrenosum
  - Begins as a pustule that breaks down into an ulcer
  - More common in Ulcerative Colitis
- Psoriasis
  - More common in Crohn's Disease
  - Can be triggered by TNF-Alpha treatment modalities





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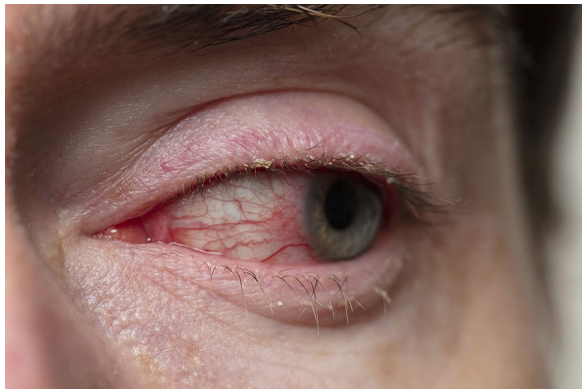
Ocular

- Present in 0.3-5% of patients
- Episcleritis
- Scleritis
  - Will require treatment with systemic steroids
- Uveitis
  - More common in women
  - Eye pain, visual blurring, photophobia, and headaches
  - Requires treatment to prevent lasting vision damage



Scleritis

Uveitis

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Other Systems

- Systemic
  - Weight loss, fever
- Hepatopancreatobiliary
  - Primary sclerosing cholangitis, Hepatitis, Cholelithiasis
- Hematologic
  - Anemia, Venous Thromboembolism
- Renal
  - Nephrolithiasis, fistulization of the urinary tract

Our role as Pediatricians

Pre-Diagnosis

- Keep a high level of clinical suspicion
- Obtain initial workup
  - CBC, CRP, ESR, CMP, FOBT, Fecal calprotectin, GI panel, Stool parasite and ova
- Refer to GI

Post-Diagnosis

- Monitor nutritional status
- Immunizations
- Ensure patient has yearly eye exams
- Psychological/Social support
- 504 plans
- Monitor for EIMs!

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The patient today

- Most recently our patient is doing well!
- Back to baseline weight and no longer has erythema nodosum or aphthous ulcers
- Back in school and enjoys playing with her new dog
- Will continue to monitor and plan for a repeat scope in October

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Questions/Comments?

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