ARTHRITIS WITH IBD

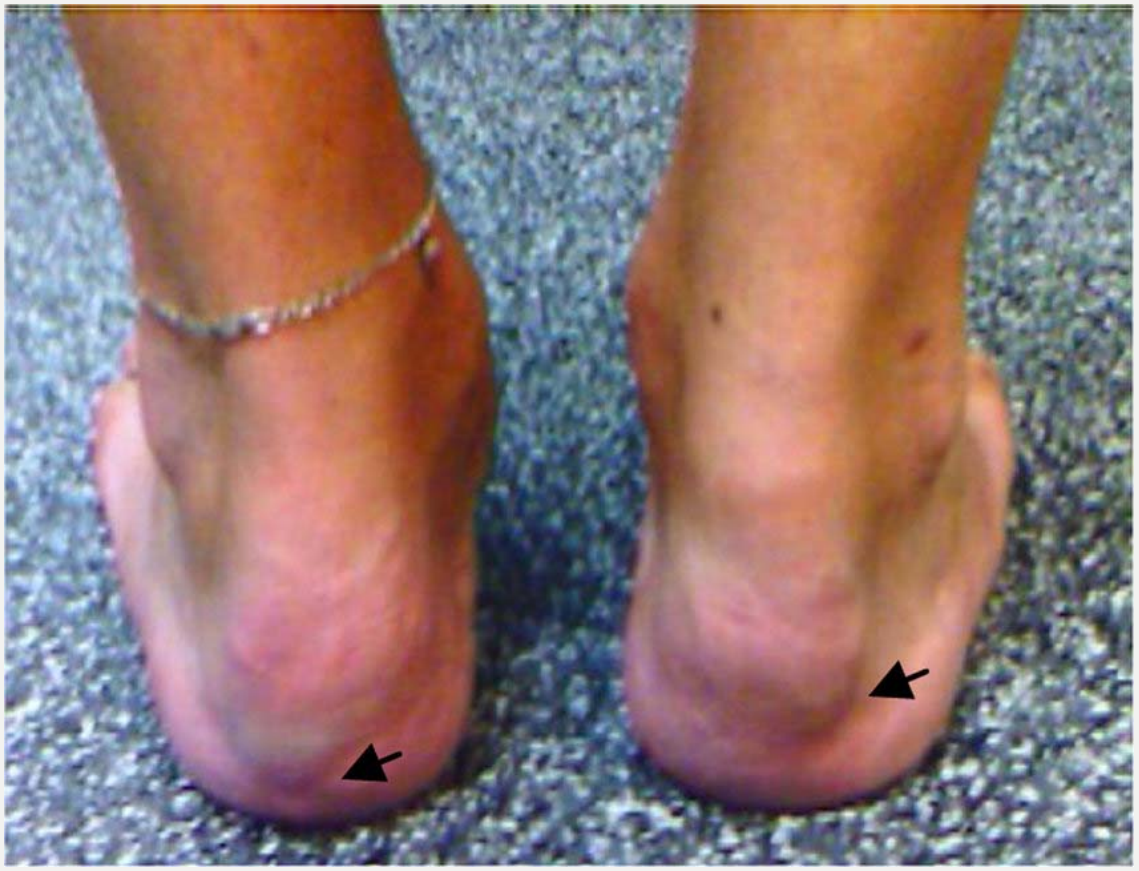
Casey Schreiber, DO
UCI—CHOC Pediatric Residency Program

Objectives

- Identify presentation of IBD arthritis and clinical symptoms
- Peripheral vs axial arthritis
- Understand the workup: lab and imaging findings
- Recognize different treatment options

Background

- UC and Crohn's most commonly associated with arthritis or spondylitis
  - *Arthritis: 6-46% of patients with IBD*
  - *Spondylitis: 1-26%*
- Peripheral arthritis, sacroiliitis, ankylosing spondylitis
- Somewhat more likely in those with large bowel disease, extraenteric features
  - *Most common extraintestinal complication IBD*
- Males and females equally
- Adults and children equally



Clinical Manifestations

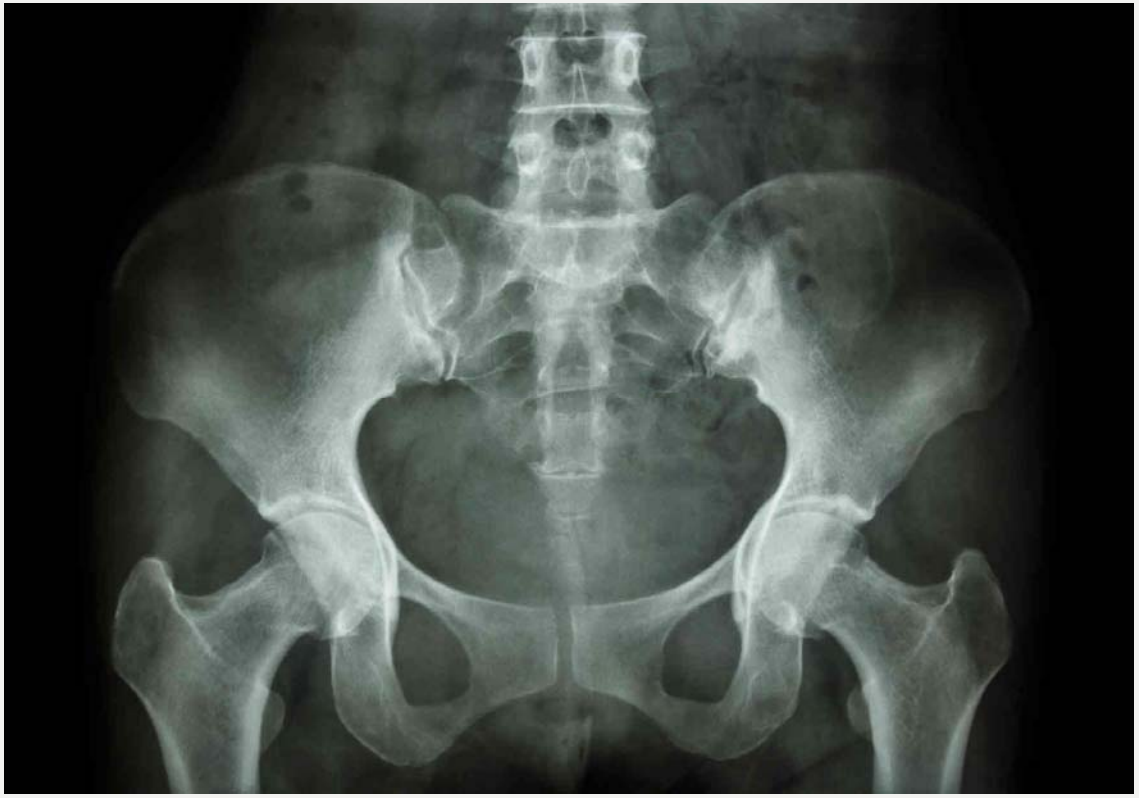
- Axial involvement: sacroiliitis and spondylitis, peripheral, or both
  - *Enthesitis and dactylitis, less commonly*
- Peripheral arthritis: type 1: acute, pauciarticular (6 or less joints)
  - *Early in course of IBD, self- limiting, non-erosive*
  - *Most commonly: knee joint*
  - *5% IBD patients*
- Type 2: polyarticular disease, affecting MCP joints
  - *50% of patients have migratory arthritis*
  - *3-4% patients with IBD*

Axial involvement

- Typically report inflammatory back pain
- Ankylosing spondylitis: Crohns > UC
- May precede GI symptoms
- Stiffness in back or buttocks after rest, often relieved by exercise
- Exam: limited spinal flexion, reduced chest expansion
- HLA-B27 : 50-75% of those with axial arthritis

Lab findings

- In normal IBD: WBC, ESR, CRP, hematocrit- reflect severity of intestinal disease
- Quiescent gut disease: may still have elevated CRP
- Anemia of chronic dz
  - *unexplained iron-deficiency anemia → incipient IBD*
- Synovial fluid: nonspecific abnormalities, 5000-12000 WBCs



Imaging

- Usually abnormal even with asymptomatic IBD
- Axial: xray spine and pelvis show typical spondylitis/sacroiliitis
- Peripheral: soft tissue swelling, juxa-articular osteoporosis, mild perosititis, effusion
  - *w/o erosion or destruction*

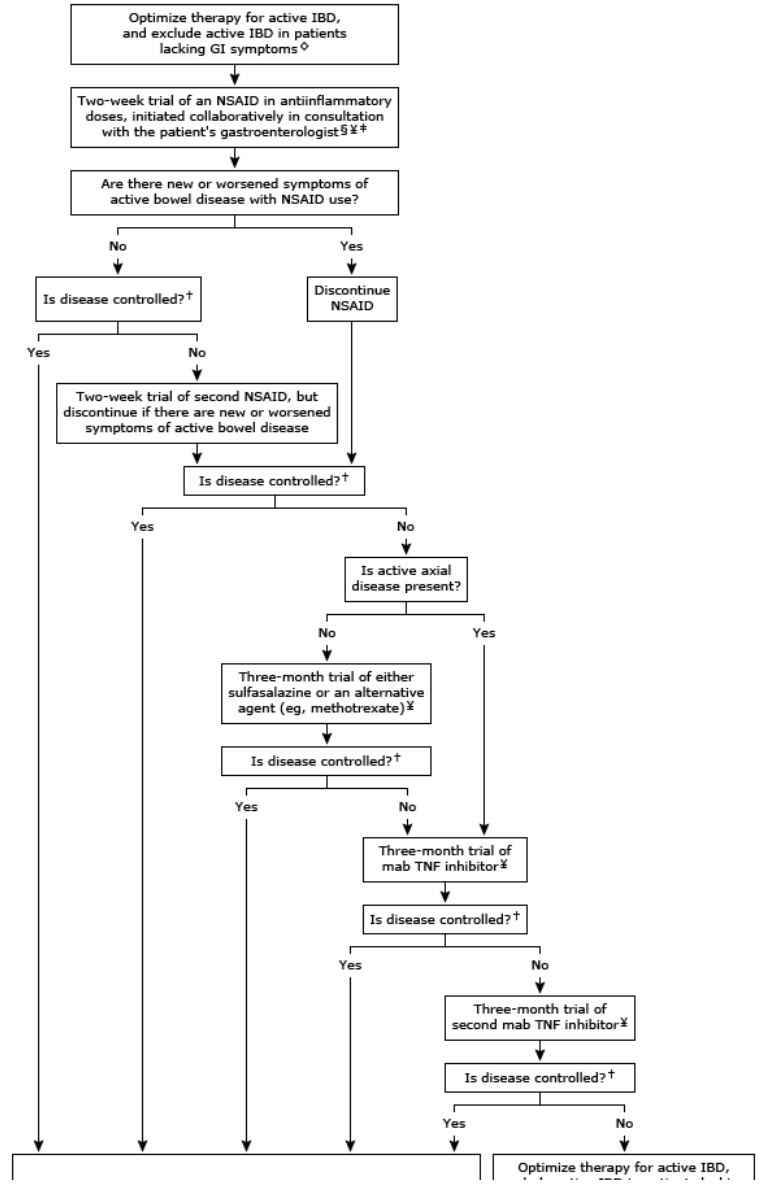
Diagnosis

- Suspect in IBD pt when develop joint stiffness, pain, inflammatory back pain
- Exam: joint swelling for peripheral involvement (hands, feet)
- If oligoarthritis or monoarthritis: joint aspiration to exclude septic arthritis
  - *Presentation may be atypical (immunosuppressed, anti-inflammatory tx)*
- Other extraenteric features: erythema nodosum
- Labs: CBC, CRP, ESR

Differential Diagnosis

- Infectious arthritis
- Erythema nodosum
- Osteonecrosis
- Hypertrophic osteoarthropathy
- Reactive arthritis
- Bechet
- Celiac disease

Treatment


Optimize therapy for active IBD, and exclude active IBD in patients lacking GI symptoms◇
Two-week trial of an NSAID in antiinflammatory doses, initiated collaboratively in consultation with the patient's gastroenterologist§¥‡
Are there new or worsened symptoms of active bowel disease with NSAID use?
No
Yes
Is disease controlled?†
Discontinue NSAID
Yes
No
Two-week trial of second NSAID, but discontinue if there are new or worsened symptoms of active bowel disease
Is disease controlled?†
Yes
No
Is active axial disease present?
No
Yes
Three-month trial of either sulfasalazine or an alternative agent (eg, methotrexate)¥
Is disease controlled?†
Yes
No
Three-month trial of mab TNF inhibitor¥
Is disease controlled?†
Yes
No
Three-month trial of second mab TNF inhibitor¥
Is disease controlled?†
Yes
No
Optimize therapy for active IBD,

Treatment: peripheral disease

- Control of underlying IBD
- NSAIDs usually first line
- DMARD – 1st line: sulfasalazine, if NSAIDs + glucocorticoid inadequate
  - *Methotrexate and azathioprine*
- Inadequate response to traditional DMARD + NSAIDs→TNF inhibitor
- Short course glucocorticoid for joint inflammation: bridging until systemic agent effective
  - *Limited joints: intra-articular injection*
  - *Methylprednisolone or prednisone*

Treatment: axial disease

- NSAIDs for spinal pain and stiffness, exercise
- Inadequate control: TNF inhibitor
- Refer to PT for long term management spondylitis : back exercises

- Coordination of care with gastroenterologist

Prognosis

- Long term patient outcomes more commonly defined by IBD than arthritis
- Peripheral arthritis usually fluctuating, nonerosive, nondeforming

References

- Arthritis and joint pain. Crohn's and Colitis Foundation. https://www.crohnscolitisfoundation.org/sites/default/files/legacy/assets/pdfs/arthritiscomplications.pdf. January 2015.
- Inman, Robert. Treatment of arthritis associated with inflammatory bowel disease. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2020.