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RHEUMATOLOGY ADVANCED
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VIRTUAL CONFERENCE



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Crohn's Disease, Ulcerative Colitis & Inflammatory Arthritis: How They Relate

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Faculty Disclosures

- Lisa Alleman
 - Novartis
 - Amgen
 - Medexus Pharma
- Anne Sullivan
 - Pfizer



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Prevalence

- Inflammatory Bowel Disease
 - Chronic immune-mediated condition which affects the gastrointestinal tract
- Crohn's Disease and Ulcerative Colitis
 - Ulcerative colitis recognized in 1875
 - Crohn's disease recognized in 1932
- Large increase globally and in the US since 1999
 - Over 3 million in the US
 - Over 7 million globally
 - 3% of the population in North America, Australia and European countries
 - Newly industrialized countries IBD prevalence is rapidly increasing



Pathogenesis of IBD and SpA

- Multifactorial disease
 - Genetics
 - Environmental factors
 - Microbiome disruption
 - Overactive immune response



- SpA
 - Human leukocyte antigen (HLA)-B27
 - Presence is not exclusive and diagnostic
 - SpA-specific gut microbiome and damage of intestinal mucosal barriers
 - Composition of the gut microbiome differs in patients with SpA from RA from healthy individuals
 - Tumor necrosis factor (TNF-a)
 - Interlukin IL 23/17

Monitoring IBD & SpA

- CRP is helpful in monitoring disease activity and response to treatment in IBD and SpA
- Fecal cal protectin

Characteristics of IBD

- Predominately age of onset 15-30
- Effects men and women equally
- Crohn's Disease – Mouth to anus – Transmural inflammation
- Ulcerative colitis – Limited to the colon – Mucosal inflammation
- Both cell-mediated chronic conditions which alternate between relapsing and remission state



Clinical Presentation

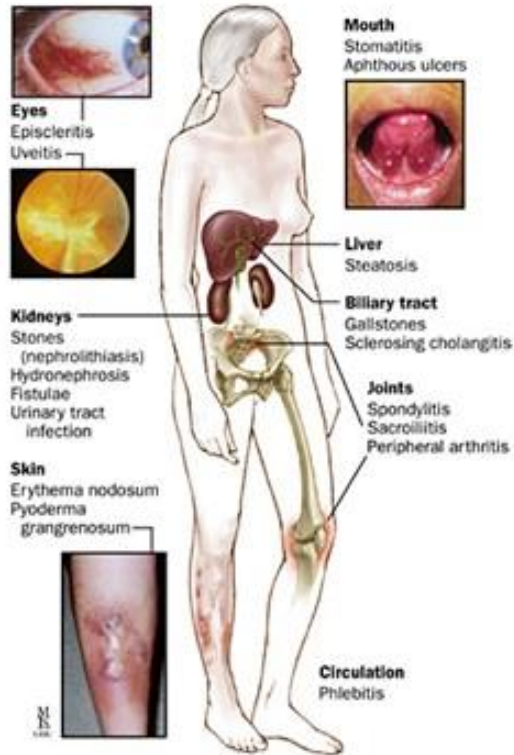
Crohn's Disease

- Epigastric pain
- Early Satiety
- Weight loss
- Nausea/Vomiting
- Abdominal distension
- Abdominal pain usually located right side and is continuous
- Development of fistulas and strictures
- Surgery typically does not resolve Crohn's disease

Ulcerative Colitis

- Bloody diarrhea
- >3-5 BM's a day
- Nocturnal stools
- Tenesmus (sense of pressure)
- Abdominal pain is intermittent
- Mucosal inflammation
- Seen in non-smokers or former smokers
- Colectomy resolves UC

Extraintestinal Manifestations



- Arthritis is the most frequent EIM seen in IBD
- Approx. 6-40% IBD have one or more EIM
- Approx. 10 % IBD present with S&S of SpA
 - Up to 2/3 patients with SpA have inflammatory lesions of the bowel mucosa, but these are frequently clinically silent
- Ocular in 4-8%
- Cutaneous in up to 8%



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Spondyloarthropathy in Inflammatory Bowel Conditions

- Inflammatory arthritis associated IBD may manifest
 - Primarily axial involvement
 - Features of spondylitis and sacroiliitis
 - Primarily peripheral joint involvement
 - Synovitis, dactylitis, enthesitis
 - Or with both axial and peripheral features



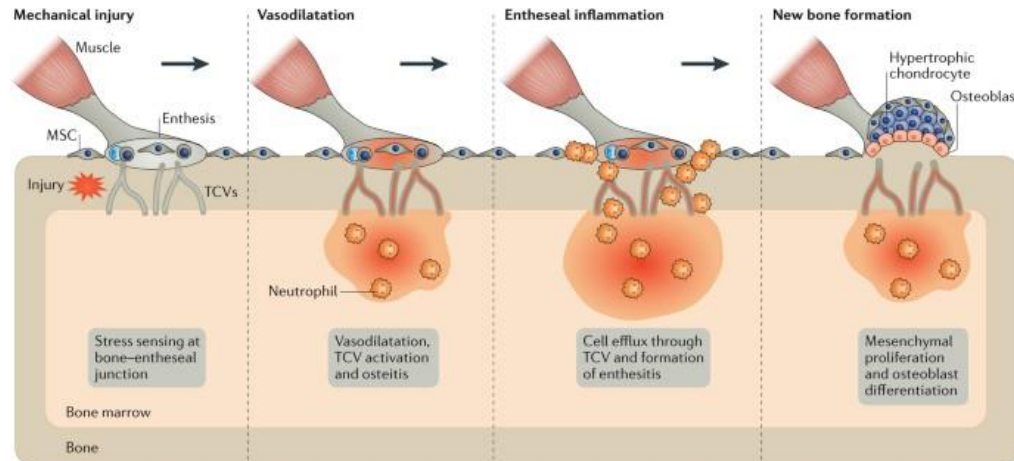
Key MSK Manifestations

- Spondylitis and sacroiliitis
 - Hallmark features of inflammatory back pain
 - Prolonged stiffness in the back and/or buttocks in the morning or after rest
 - Stiffness & pain are relieved by exercise/activity
 - Back symptoms are generally unrelated to the activity of the IBD



Key MSK Manifestations

- Enthesitis
 - Enthesitis-inflammation of the tendon insertion to the bone
 - Plantar fasciitis & Achilles tendinitis most common forms of enthesitis



Spondyloarthropathy in Inflammatory Bowel Conditions

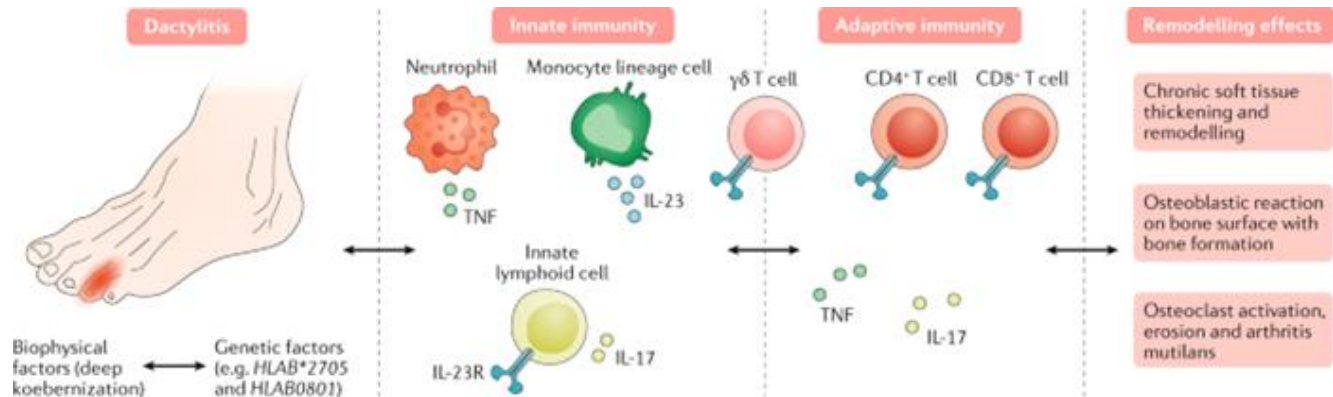
- **Type 1**
 - Peripheral arthritis tends to be acute and pauciarticular (≤ 6 joints)
 - Typically occurs early during the bowel disease
 - Self-limiting (90% < 6 months duration)
 - Nonerosive
 - The knee is the joint most commonly joints affected
 - Affects about 4-6% of IBD pt
 - Joint symptoms may occur prior to the onset of IBD symptoms
 - Arthritis often coincides with flares of the bowel disease

Spondyloarthropathy in Inflammatory Bowel Conditions

- **Type 2**
 - Polyarticular disease (>6 joints)
 - Affects MCP joints often
 - Other joints (knees, ankles, elbows, shoulders, wrists, proximal interphalangeal [PIP], and metatarsophalangeal [MTP] joints) are less often affected
 - Approximately one-half of the patients with IBD have migratory arthritis
 - Active synovitis may persist for months and may recur repeatedly but is nonerosive
 - Episodes of exacerbations and remissions may continue for years
 - Articular involvement rarely precedes the diagnosis of IBD
 - Arthritis symptoms typically do not parallel the activity of bowel disease
 - Affects about 3-4% of IBD pt

Key MSK Manifestations

- Dactylitis
 - Inflammation of the entire digit
 - Termed "sausage-finger" or "sausage-toe"
 - Not seen in RA, seen in Spondyloarthropathy Conditions



References

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Questions?