Top Ten Things Rheumatologists Should Know About the Inflammatory Bowel Diseases

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Joint diseases are the most common extra-intestinal manifestations of the inflammatory bowel diseases (IBD), occurring in 13% of patients with Crohn's disease (CD) or ulcerative colitis (UC).[1] This article reviews considerations for patients with arthritis and a co-existing IBD diagnosis.

1. Peripheral arthritis associated with IBD.
Two different types of arthritis can be identified. Type 1 is non-erosive, asymmetrical, and affects less than five large joints. The arthritis is related to activity of the underlying bowel disease, potentially occurring prior to onset of bowel symptoms. The arthritis is managed by treating the acute flare of CD or UC. [2] Type 2 is polyarticular and symmetrical, and is less often correlated with bowel disease activity.

2. Axial arthropathy and IBD.
The risk of sacroiliitis and ankylosing spondylitis in IBD patients is 10% and 3%, respectively.[1] Similarly, 4.1% of patients with ankylosing spondylitis will have a co-existing diagnosis of IBD.[3] Treating the IBD does not influence the natural history of the axial arthritis.[2]

3. Investigating a new diagnosis of IBD.
Patients with spondyloarthritis may present with active gastrointestinal symptoms (e.g., abdominal pain, diarrhea, rectal bleeding). Non-IBD considerations include non-steroidal anti-inflammatory drug (NSAID) enteropathy, gastrointestinal infections including *Clostridium difficile*, and celiac disease.[4]

4. Diagnosing IBD.
Colonoscopy with biopsies is necessary for an IBD diagnosis. Modalities for imaging the small bowel include contrast-enhanced ultrasound, magnetic resonance (MR) enterography, and computed tomography (CT) enterography. General CT scans of the abdomen for IBD should be avoided unless ruling out an intestinal complication (e.g., perforation or obstruction).

5. Pain Management.
NSAIDs are associated with an increased risk of triggering a flare of IBD. Acetaminophen is safe for managing joint pain in IBD patients.[5]

6. Treating an acute flare with steroids.
Prednisone is prescribed at 40 mg daily for one week followed by dose tapering by 5 mg per week. Patients with CD limited to the ileum or right colon can use oral budesonide, which has fewer systemic side effects. Budesonide multi-matrix (MMX) is a formulation of budesonide that extends budesonide release throughout the colon using MMX system technology and can treat a UC flare.[6]

7. Treating IBD with sulfasalazine and 5-aminosalicylates (5-ASA).
Sulfasalazine and 5-ASA (mesalamine) are effective in treating UC with weaker evidence for Crohn's colitis. Five-aminosalicylate medications are available as oral tablets, rectal enemas and suppositories. Each medication has a slightly different formulation and coating that allow it to reach different parts of the bowel. [7]

8. Immunomodulators.
Methotrexate, azathioprine, and 6-mercaptopurine are ineffective in inducing remission in IBD. They are used following induction (e.g., with steroids) or in combination with an anti-tumor necrosis factor (anti-TNF) agent to reduce immunogenicity. Patients with a genetic mutation affecting the thiopurine methyltransferase (TMPT) enzyme need dose reduction (heterozygote) or avoidance (homozygote) of azathioprine or 6-mercaptopurine.[8]

9. Anti-TNF Therapies.

Infliximab is used in CD and UC: 5 mg/kg at weeks 0, 2, 6, followed by maintenance dosing every 8 weeks. Adalimumab is used in CD and UC: week 0, 160 mg; week 2, 80 mg; then 40 mg every 2 weeks. Golimumab is used in UC: week 0, 200 mg; week 2, 100 mg; then 100 mg every 4 weeks. Certolizumab is not approved in Canada for IBD. Etanercept is not effective in IBD.[8,9]

10. New biologics in IBD.

Vedolizumab is an antibody against $\alpha_4\beta_7$ integrin for CD and UC. Vedolizumab is the first gut selective biologic.[8,9] Its role in managing co-existing spondyloarthritis is unknown.

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Redefining Happiness: My Experiences in American and Canadian Health Systems *(Continued from page 22)*

rheumatologist in the U.S. From what I have learned from recent Ontario Rheumatology Association (ORA) stats, the pay in Ontario is similar. As I am no longer part of a massive interconnected healthcare system, I do not have access to my patients' records from their family doctor, their hospital visits, etc. without a lot of requests and waiting. This does not differ from any physician in private practice in most countries, but both Canada and the U.S are testing options that create a comprehensive health record that is accessible from any site using the Internet.

In the U.S, some foreign-trained physicians are required to repeat training or pass the U.S. Medical Boards for their specialty, but once this is done, they can practice without restriction. In general, Canadian-trained physicians do not require any additional testing or training as their training is considered equivalent to the U.S. While Canada considers U.S. physician training equivalent, the College of Physicians and Surgeons of Ontario requires a year of supervised practice in your specialty to assist one with the transition to the Canadian system. While obtaining a supervisor was initially difficult, I have greatly appreciated Dr. Mary Lee's guidance and expertise as I learn about the Canadian medical system, and I could not imagine trying to care for patients without her assistance.

In summary, I have found the Canadian system similar to the United States' Veteran's Health system, but with some differences as I mentioned and others you are more familiar with than I am. However, while I cannot determine this for you, for me and my family, the grass is greener in Canada.

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