

# Evidence Discussion – Chronic Diarrhea (More than 30 days) (AB-21.2)

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The initial evaluation of chronic diarrhea (more than 30 days) involves non-imaging modalities (blood tests, stool tests, and colonoscopy), to evaluate for celiac disease, giardia and inflammatory bowel disease. If these evaluations are non-diagnostic, imaging can be considered to identify more unusual causes of chronic diarrhea such as obstruction, malignancy, biliary causes and small bowel disorders such as small bowel Crohn's disease.

- Computer tomography (CT) of the abdomen offers excellent 3-dimensional resolution of the gut and its surrounding structures, especially when performed with use of oral and/or intravenous (IV) contrast agents. CT imaging captures parts or the whole of the abdomen, or can be directed to interrogate with specialized techniques a specific organ. Depending on clinical suspicion, for this condition, CT of the abdomen, CT of the abdomen and pelvis or specialized CT enterography of the small bowel may be employed. CT scan requires a significant dose of ionizing radiation, but is ideally suited to imaging lesions within the gut because the speed of image acquisition reduces the potential for motion artifact.
- Magnetic resonance imaging (MRI) uses a magnetic field to capture excellent 3-dimensional resolution. As with CT scans, the technique is often performed with IV contrast agents, and can with specialized techniques be directed either at whole or parts of the abdomen or at specific abdominal structures. For this condition MR enterography delivers high resolution images of small bowel mucosa to evaluate for the subtle inflammatory changes such as those seen in small bowel Crohn's disease. MRI yields better soft contrast resolution than CT and does not expose individuals to ionizing radiation, but due to longer image time is motion artifact-prone and thus less suited to resolving gastrointestinal detail. In addition, and especially in youths, MRI may require sedation.

## References:

- 1) Menees SB, Poweell C, Kurlander J, Goel A, Chey WD. A meta-analysis of the utility of c-reactive protein, erythrocyte sedimentation rate, fecal calprotectin and fecal lactoferrin to exclude inflammatory bowel disease in adults with IBS. *The American Journal of Gastroenterology*. 2015;110(3):444-454.
- 2) Smalley W, Falck-Ytter C, Carrasco-Labra A, Wani S, Lytvyn L, Falck-Ytter Y. AGA clinical practice guidelines on the laboratory evaluation of functional diarrhea and diarrhea-predominant Irritable Bowel Syndrome in adults (IBS-D). *Gastroenterology*. 2019;157(3):851-854.