

Evidence Discussion – Acute and Persistent Diarrhea (Up to 30 Days) (AB-21.1)

Acute or persistent (up to 30 days) diarrhea is a common complaint that most often results from self-limited infectious or digestive causes, and for this reason, imaging is generally not indicated. However, in a subset of patients and in the setting of clinical suspicion, imaging is necessary to exclude vascular insufficiency, perforation, obstruction and severe metabolic derangement. Determining the situations in which imaging is necessary is based on provider concern for such conditions in addition to demographic factors such as age and prior medical and surgical history. When imaging is necessary, CT scan with contrast is the modality of choice.

- 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 all of the abdominal organs and the surrounding cavity and mesentery. It is central to the evaluation of this condition because it can accurately diagnose the presence and location of obstruction, malignancy, vascular insufficiency, toxic megacolon, and perforation in the subset of high-risk patients. 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. Typically performed with IV contrast in patients with normal kidney function, there is the added risk of allergic reaction to contrast, however the contrast enhances the ability to evaluate for both infectious and vascular conditions.

References:

- 1) Riddle MS, Dupont HL, Connor BA. ACG Clinical Guideline: Diagnosis, Treatment, and Prevention of Acute Diarrheal Infections in Adults. *The American Journal of Gastroenterology*. 2016;111(5):602-622.
- 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.