



Co-occurrence of inflammatory fibroid polyp in Crohn's disease: A MR enterography study

To the Editor,

Inflammatory fibroid polyps (IFPs) are rare benign submucosal lesions of the alimentary tract most commonly observed in the stomach. Although IFPs generally present as polypoid mass lesions in the gastric antrum, they can occur throughout the gastrointestinal system, particularly in the ileum and colon (1). In adults, small bowel involvement usually presents with intestinal obstruction and intussusception. Concurrent occurrence of inflammatory bowel disease, such as Crohn's disease (CD) with IFP has rarely been reported (2), and to our knowledge, studies with magnetic resonance enterography (MRE) findings are scarce. In this letter, we report the MRE findings of an adult with a history of CD who was pathologically confirmed to have accompanying IFP.

An 84-year-old woman with a previous history of CD was admitted with nausea, vomiting, abdominal distention, and constipation. She was on maintenance remission therapy with sulfasalazine before admission to the emergency department. Physical examination revealed abdominal distention and tenderness. Abdominal X-ray demonstrated dilated bowel loops, and ultrasound examination revealed a suspicious mass lesion in the ileal segment of the small bowel. The patient was referred for MRE examination with a 1.5-T MR system (Symphony; Siemens Medical Systems, Erlangen, Germany), and the images were compared with the MRE images obtained 2 years previously (Figures 1,2). After detection of an ileal mass lesion with luminal extension, she was referred for surgery. A 50-cm bowel segment containing the cecum, ileocecal valve, and ileum was surgically

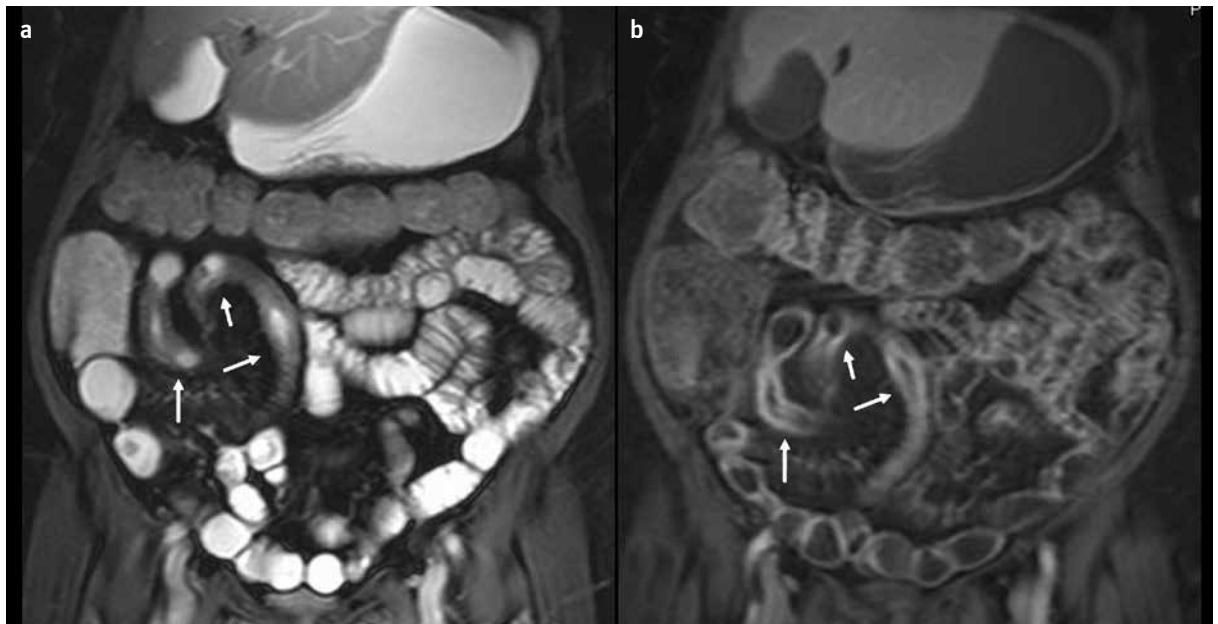


Figure 1. a, b. MRE images obtained 2 years previously. Coronal true fast imaging with steady state precession (True-FISPS) (a) and post-contrast T1-weighted MRI (b) show concentric wall thickening and enhancement in the terminal ileum (arrows). Increased mesenteric fatty tissue, vascularity, and wall thickening are compatible with CD. However, no polypoid mass lesion is observed in the same examination.

Address for Correspondence: Türker Acar, Department of Radiology, Abant İzzet Baysal University, Training and Research Hospital, Bolu, Turkey

E-mail: drtacar@hotmail.com

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Figure 2. a, b. MRE images obtained following complaints of intestinal obstruction. Coronal true-FISPS (**a**) and post-contrast T1-weighted MRI (**b**) show the same features of CD as described 2 years previously. However, the current images show an avidly enhancing polypoid mass lesion within the ileum (arrows).

resected and sent to the pathology department. Macroscopic examination revealed a brown-colored papillomatous mass lesion, measuring 5x1.8 cm and extending toward the bowel lumen, covered by ulcerated mucosa. The rest of the ileal mucosal surface was flattened and edematous. Microscopic evaluation revealed spindle cells infiltrating the mucosa and submucosal layers with abundant eosinophilic infiltration. Based on these pathological findings, IFP diagnosis was made.

Inflammatory fibroid polyps was first reported by Vanek in 1949 as a gastric submucosal granuloma with eosinophilia (3). Several hypotheses have been postulated regarding IFP pathogenesis, including exuberant host response to trauma, inherited transmission, neural hyperplasia, and allergic background (2). IFP with accompanying simultaneous CD is an uncommon condition. In a study with a very large sample of 63 cases with IFPs, only two cases (3%) had co-occurrence of CD (4). Previous abdominal surgery for complications of CD or CD itself may initiate local stimuli of the bowel, leading to the formation of this reactive soft-tissue lesion. Regenerative pseudopolyps, lymphoid follicular hyperplasia, and lymphangiectasia with diffuse edema are the other possible lesions that may arise from CD. In addition to these benign lesions, malignancy may arise from CD. Therefore, histopathological examination is indispensable for differential diagnosis.

In conclusion, IFPs are rarely accompanying lesions in CD. Regarding the better soft-tissue contrast afforded by MR imaging, which is required for tissue characterization, MRE is an excellent non-invasive method to determine these types of polypoid mass lesions in CD.

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Türker Acar¹, Mustafa Harman², Serkan Güneylü³, Nevra Elmas²

¹Department of Radiology, Abant İzzet Baysal University, Training and Research Hospital, Bolu, Turkey

²Department of Radiology, Ege University Faculty of Medicine, İzmir, Turkey

³Department of Radiology, Bülent Ecevit University Faculty of Medicine, Zonguldak, Turkey

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