

Inflammatory Fibroid Polyp of the Ileum in Newly-diagnosed Crohn's Disease Patients

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Abstract

Introduction: Inflammatory fibroid polyps are benign submucosal polyps of the gastrointestinal tract. They are found mainly in the stomach but also in the small bowel where they can cause small bowel obstruction and intussusception. The treatment is surgical resection of the polyp. Few cases have been reported in Crohn's disease patients. We describe two cases of newly-diagnosed ileal Crohn's disease with concomitant inflammatory fibroid polyp presenting in an unusual way.

Case report: Two female patients aged 38 and 54 years respectively presented with abdominal pain without bowel obstruction. Colonoscopy and CT demonstrated a mass in the ileum. Surgical resection of the terminal ileum and cecum were performed. Pathological examination showed an inflammatory fibroid polyp in each case. Both patients had Crohn's disease recurrence and required immunomodulator treatment on follow-up.

Conclusion: Inflammatory fibroid polyps of the terminal ileum can occur in Crohn's disease patients with non-obstructive clinical presentation.

Keywords: Inflammatory fibroid polyp; Crohn's disease

Introduction

Inflammatory fibroid polyps (IFP) of the gastrointestinal tract were first described by Vanek in 1949 [1]. These are rare benign sub mucosal polyps arising from mesenchymal cells and can occur anywhere along the GI tract but are commonest in the stomach, followed in frequency by the small bowel [2]. Since the small bowel has a narrow lumen and is susceptible to intussusception by masses that serve as lead points, the typical presentation of ileal IFP is small bowel obstruction [3]. Recent molecular studies by Huss et al. found that activating PDGFRA mutations in inflammatory fibroid polyps occur in exons 12, 14 and 18 and are associated with tumor localization. Exon 12 mutations predominate in the small intestine, while exon 18 mutations occur frequently in the stomach [4].

The terminal ileum is the most common location of Crohn's disease. Rarely IFP had co-occurred with Crohn's disease and the presentation was that of small bowel obstruction. We present two cases of small bowel IFP occurring in newly diagnosed Crohn's disease patients with an uncommon presentation.

Case 1

A 38 year old female presented with abdominal pain and anemia. Her past medical history revealed endometriosis. At colonoscopy a tumor was observed in the cecum protruding from the ileocecal valve that prevented ileocecal intubation (Figure 1). A CT scan

demonstrated both thickening of the terminal ileum wall and a mass involving the terminal ileum and cecum (Figure 2). Biopsies of the mass showed inflammatory tissue. Due to the size of the mass and to exclude malignancy, she underwent an ileocecal resection. The surgeon reported creeping fat and an inflamed terminal ileum. The pathology revealed an inflammatory fibroid polyp and the surrounding mucosa was inflamed with features suspicious of Crohn's ileitis (Figure 3).

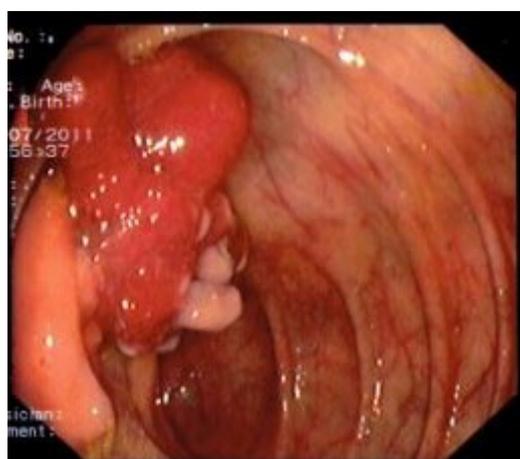


Figure 1: Cecum with a mass protruding through the ileocecal valve.



Figure 2: CT scan showing an inflammatory mass in terminal ileum and cecum.

Post-surgery the patient complained of diarrhea and low back pain that was diagnosed as sacroiliitis. Colonoscopy revealed Crohn's disease recurrence of the neoterminal ileum with Rutgeerts score i2. A short course of steroids and the initiation of Azathioprine brought the patient into remission with mucosal healing.

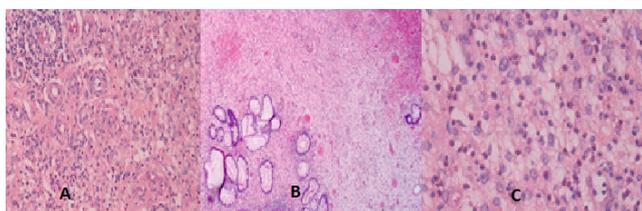


Figure 3: Characteristic pathology of IFP. Plate A showing broadening of the submucosal layer. Plate B showing prominent capillaries and plate C showing eosinophilic infiltrate.

Case 2

A 54 year old patient presented with abdominal pain without diarrhea. CT scan demonstrated thickening of the terminal and distal ileum and a mass in the distal ileum. Colonoscopy showed a normal colon but ileocecal intubation was unsuccessful. The patient underwent ileocecal resection. Pathology of the mass revealed an inflammatory fibroid polyp and surrounding inflammation compatible with Crohn's disease. This patient continued to have diarrhea and at colonoscopy performed 6 months after surgery there was Rutgeerts i2 recurrence in the neoterminal ileum. The patient is currently receiving Azathioprine.

Discussion

We present here two newly-diagnosed Crohn's disease patients with an inflammatory fibroid polyp of the terminal ileum at presentation. Both patients had an unusual presentation with abdominal pain and constipation as the dominant complaint. Neither had small bowel

obstruction or intussusception. Postoperatively both patients went on to have classic symptoms of postoperative Crohn's disease recurrence including diarrhea, elevated CRP and endoscopic features of neoterminal ileal disease.

Inflammatory fibroid polyps of the gastrointestinal tract are rare benign submucosal polyps. To date 9 cases have reported the association of IFP with Crohn's disease [5-12]. The previously reported cases had similar ileal location of the IFP and, unlike our patients, an obstructive clinical presentation. There were three reported IFP cases in ulcerative colitis patients all of them were post colectomy patients presenting with obstructive features and the occurrence was in the ileum in the constructed pouch [13-15].

In conclusion inflammatory fibroid polyps of the terminal ileum can present in Crohn's disease patients without intestinal obstruction. Surgical treatment is the rule and postoperatively disease recurrence is common as for other Crohn's disease patients.

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