Inflammatory Fibroid Polyp of the Jejunum: An Uncommon Cause of Gastrointestinal Bleeding

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Introduction

Although the small bowel represents roughly 90% of the mucosal surface of the gastrointestinal tract, it is considered a rare location for tumors (1). Small bowel tumors represent an estimated 3 - 6% of all digestive tract tumors. However, the diagnosis of these tumors may increase as the practice of visualizing the small bowel through pill endoscopy and deep enteroscopy expands (2).

Inflammatory fibroid polyps (IFPs) represent a rare, tumor-like, sub-mucosal lesions that are usually discovered incidentally (3). IFPs are typically asymptomatic and located in the gastric antrum or ileum. We present an uncommon case of symptomatic anemia due to an inflammatory fibroid polyp located in the jejunum.

Case Report

A 65 year old Caucasian female with a history of hypertension, diabetes, COPD, and coronary artery disease was referred to our clinic complaining of a 5-week history of severe iron deficiency anemia which improved with oral iron supplementation. She denied any history of gross rectal bleeding or melena but previous stool guaiac testing was found to be positive. The patient also admitted to a recent dizzy spell, chronic fatigue and headaches.

Initial evaluation of this patient’s anemia included upper endoscopy and colonoscopy which were both unrevealing. Small bowel capsule endoscopy was performed and demonstrated a polyoid lesion in the jejunum (Figure 1). Due to the abnormality observed on capsule endoscopy, the patient was referred for deep enteroscopy.

We performed an antegrade spiral enteroscopy which demonstrated an ulcerated submucosal lesion in the mid-jejunum approximately 100 cm distal to the Ligament of Treitz. The submucosal lesion was approximately 15 mm in diameter with central ulceration (Figure 2). Endoscopic biopsies of this lesion showed only nonspecific inflammation but the lesion was resected due to associated bleeding and concern for malignancy. Surgical pathology was consistent with an inflammatory fibroid polyp characterized by severe, chronic inflammation (Figures 3 and 4).

Discussion

IFPs are uncommon, tumor-like lesions of the gastrointestinal tract. First described by Vanek in 1949, IFPs are submucosal lesions composed of fibrous tissue, blood vessels, and inflammatory cells (1,2). They can be sessile or polypoid and rarely reach more than 6 cm in size although there have been reports of IFPs up to 20 cm (3).

IFPs are usually discovered incidentally in asymptomatic patients and occur more frequently in women. Typically, patients diagnosed with IFP are in their 5th to 7th decade of life (4). In rare cases, IFPs can lead to mechanical blockage resulting in small bowel obstruction or intussusception (5). These patients can present with nausea, vomiting, weight loss, or abdominal pain. If the overlying mucosa ulcerates, patients can experience bleeding resulting in anemia (6).

The pathogenesis of IFP is unclear. They are histologically characterized by vascular and fibroblast proliferation. Some authors have proposed that IFPs are the result of an allergic reaction to stimuli such as trauma or bacteria, inducing chronic inflammation (6). There have been three documented cases of a familial occurrence of IFPs. Lasota et al demonstrated that IFPs of the small intestine, similarly to IFPs of the stomach, express platelet derived growth factor receptor (PDGFR) and frequently have oncogenic PDGFR. These authors accordingly consider IFPs to be PDGFR-mediated benign neoplasms (7).

The diagnosis of IFP is made by direct visualization of the lesion via laparotomy or endoscopy. There are no distinctive radiologic features that can be used to differentiate IFPs from other mural or intramural lesions of the GI tract (6). Although they are benign lesions, IFPs should be surgically removed to exclude a malignant process and prevent any future complications (6,8,9,10).

IFPs are a rare tumor-like lesion of the gastrointestinal tract. However, gastroenterologists should consider this lesion in the differential diagnosis of gastrointestinal bleeding and/or a submucosal lesion. IFPs should be surgically resected when identified. Recognition of these lesions in the small bowel may increase with recent advances in endoscopic evaluation via capsule endoscopy and deep enteroscopy.