INFLAMMATORY FIBROID POLYP OF THE ILEUM RESULTING IN INTUSSUSCEPTION - A CASE REPORT

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ABSTRACT

Inflammatory fibroid polyp (IFP) is an uncommon gastrointestinal tract lesion. The true incidence of which is difficult to establish. The stomach and ileum are the most commonly affected sites. We describe a case of 60 year old male presented with clinical manifestations of obstruction due to intussusception. He underwent emergency surgery and the specimen was subjected for histopathological examination, which was diagnosed as inflammatory fibroid polyp.

KEY WORDS: Intussusception, Inflammatory fibroid polyp, Ileum.

1. INTRODUCTION

Inflammatory fibroid polyp (IFP) is an uncommon sub mucosal non-neoplastic lesion of the gastrointestinal tract with uncertain origin. It was described for the first time in 1949 by Vanek and defined as ‘gastric submucosal granuloma with eosinophilic infiltration’. In 1953 Helwig and Ranier confirmed the fibroblastic origin of proliferating spindle and stellate cells, and coined the term inflammatory fibroid polyp which has remained the generally accepted term. They typically present in the 5th to 7th decade of life and have no sex predilection. Most common localization of this lesion is the stomach, but a few cases in the small bowel, large bowel, duodenum, appendix, esophagus and gall bladder have also been reported. IFP has also been referred to as gastric eosinophilic sub mucosal granuloma, Vanek’s tumor, eosinophilic granuloma, hemangiopericytoma, myxoma, inflammatory pseudo tumor, fibroma with eosinophilic infiltration and polyploid myo-endothelioma.

2. CASE REPORT

A 60 year old male presented with clinical manifestations of obstruction due to intussusception. Physical examination revealed diffuse tenderness of the abdomen. Laboratory tests were normal except for leukocytosis. Abdominal X-ray showed dilated small bowel segment. He underwent emergency surgery and the excised specimen submitted for histopathological examination. Macroscopically after opening the lumen of small bowel, a solid, polyloid mass of 4x2.5x2cm projecting into the lumen was found (Fig 1& 2). Histopathologically it was diagnosed as inflammatory fibroid polyp of ileum with ulcerated mucosa. Submucosa shows vascular, fibroblast proliferation and an inflammatory response, predominantly eosinophils (Fig3&4).

3. DISCUSSION

IFP is one of the least common nonneoplastic lesions of GI tract. They are mostly found in the gastric antrum along the lesser and greater curvature (70%) or in the ileum (20%); however, they are considered to be very rare in the colon, jejunum, duodenum and esophagus. It was first described as a distinctive pathological entity by Vanek in 1949 when he described six case reports of gastric sub mucosal granulomas with eosinophilic infiltration. Since then there have been sporadic case reports but it is difficult to establish the true incidence.
Fig. 1: Ileal intussusception with arrow showing polypoid mass.

Fig. 2: Ileal intussusception with arrows showing polypoid mass cut section

Fig. 3: Histopathological picture of inflammatory fibroid polyp of ileum with intact mucosa [H&E X400].

Fig. 4: Histopathological picture of inflammatory fibroid polyp of ileum with ulcerated mucosa. Submucosa shows vascular, fibroblast proliferation and an inflammatory response, predominantly eosinophils [H&E X600].
The etiology of IFP is not known, but a mechanism of chemical, traumatic or metabolic mucosal injury with a poorly controlled inflammatory response has been hypothesized. It is generally accepted that this is not a neoplasm, but is reactive process to physical, chemical or microbiological stimuli.

Many IFPs are identified incidentally during endoscopy or laparotomy. When symptomatic, the clinical presentation relates to the size and site of the tumour. The symptoms are often vague. IFP of the stomach most frequently produce vomiting, abdominal pain and nausea. If located in the small or large intestine, it is usually asymptomatic or result in subtle ailments like loss of body mass, diarrhea and anemia. When it becomes large in size most often causes intussusception and/or obstruction. If the overlying mucosa ulcerates then GI bleeding or anemia may occur. Acute presentations with intussusception or obstruction are also commonly described. Surgical excision is the mainstay of treatment and the tumours are not thought to recur following complete resection. In the current case report, 60 years male patient was admitted with vomiting and pain abdomen. No GI bleeding or anemia.

Macroscopically lesions may be polypoidal or sessile, varying in size from 0.2 – 12 cm with average reported size of 4 cm. They usually present in the 6th or 7th decades but cases were reported in a wide range of 2 to 90 years. IFPs rarely reach more than 6 cm and their size is presumably related to the likelihood of symptoms. Recent papers have described ileal IFPs of smaller size presenting with symptoms of obstruction. There have been reports of colon IFP measuring up to 14 cm and retroperitoneal IFS measuring up to 20 cm. In the present study size of the polypoid mass is 4 cm.

Histologically they arise from the submucosa and are characterized by vascular, fibroblast proliferation and an inflammatory response, dominated by eosinophils. Further immunohistochemical analysis can demonstrate variable reactivity for Actin, CD34, Desmin, CD117 and S100. The morphology is usually characteristic, but potential differential diagnoses of Vanek tumours on biopsy alone include GIST, inflammatory pseudotumour and other rare soft tissue lesions.

4. REFERENCES