

Adult Intussusception Due to Inflammatory Fibroid Polyp of the Intestine- A Rare Case

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Abstract

Introduction: There are various pathologies in the small bowel that can lead to small bowel obstruction or intussusception. The etiology causing obstruction is different for different age groups. Benign disease contributes to the typical cause of small bowel obstruction in children and adolescents, while malignancy or adhesions are far more common in the older group of patients. Although cases of adult intussusception caused by benign diseases are rare, there are reports of inflammatory fibroid polyps causing adult intussusception of the terminal ileum published in the literature.

Case history: We report a case of a 42 year old, female patient who presented in our Emergency Department with the chief complaints of pain abdomen off and on for 3 weeks, with incomplete evacuation of stools for 1 week and vomiting 2 episodes per day for 3 days.

Conclusion: In a case of intestinal obstruction caused by an inflammatory fibroid polyp, although the presence of which is rare, the only solution is a surgical approach.

Keywords: Claw sign, Inflammatory fibroid polyp, Intestinal obstruction, Intussusceptions.

I. Introduction

Intestinal obstruction caused by intussusception is an atypical and uncommon presentation in adults[1]. These patients usually present with intermittent symptoms of intestinal obstruction. Intussusception itself in adults is a rare entity, that differs greatly in etiology from its pediatric component. While most of the patients with intussusception have a malignant etiology,[2] the case we are presenting is an adult patient of intermittent intussusception with an inflammatory benign polyp. The aim of our study, therefore, is to emphasize that some rare etiologies may also be involved in cases of adult intestinal obstruction.

II. Case Presentation

A 42 year old female patient, came with the chief complaints of diffuse pain abdomen off and on for 3 weeks and incomplete evacuation of stools for 1 week. Consistency of evacuated stools was normal. Patient also gave history of vomiting 1-2 episodes per day for 3 days before she presented to the emergency department . On admission, patient was stable with pulse rate 88bpm, blood pressure 120/80 mm of Hg, respiratory rate of 14rpm. Abdomen was mildly distended with mild guarding. Barium enema was done which was suggestive of 'claw sign', a classical finding in intussusception. X-ray erect abdomen was suggestive of multiple air fluid levels and Ultrasonography was suggestive of a polyp arising from the terminal ileum measuring 5x5x4 cm with ileo-ileal intussusception, sub-acute intestinal obstruction and dilatation of proximal small bowel.

III. Management

An exploratory laparotomy was performed with the diagnosis of sub-acute intestinal obstruction. Intraoperatively, an intussusception with a mass lesion at its lead point approximately 20 cm proximal to the caecum was found(Fig 1and Fig 2). Intussusception was ileo-ileal and reduction of the same was done during exploration. Edema at the lead point of the bowel as well as walls of the bowel was present. Resection and anastomosis of the bowel i.e, the involved portions of the small intestine was performed.



Figure 1



Figure 2

IV. Histological Report

Inflammatory fibroid polyp arising from the mucosal surface measuring 5cm x 5cm x 4cm leading to intussusceptions(Fig 3).

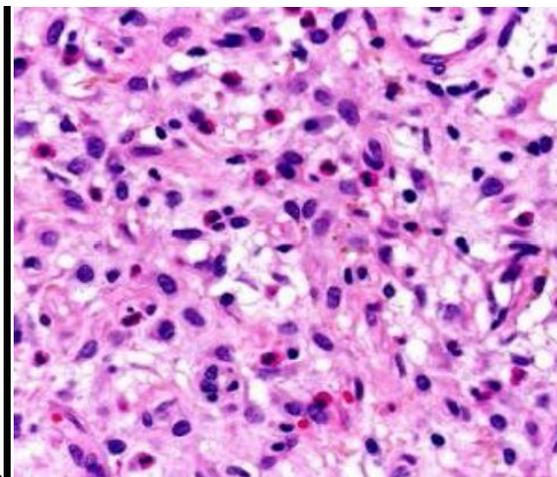


Figure 3

V. DISCUSSION

Inflammatory fibroid polyps are rare benign tumors of the gastrointestinal tract with the most common site being the gastric antrum, followed by the ileum. These polyps are one of the rare conditions leading to intestinal obstruction in adults. Inflammatory fibroid polyps are among the least common benign lesions of the gastrointestinal tract. Originating from the submucosal layer as a solitary or sessile lesion with an inflammatory basis, they may occur throughout the intestinal tract but most commonly encountered in the gastric antrum and small bowel.[3] Inflammatory Fibroid Polyps usually measure between 2 and 5 cm in diameter, although sizes upto 12 cm in diameter have also been encountered as in a giant inflammatory fibroid polyp.[4] Inflammatory Fibroid Polyp was first described by Vanek as a 'gastric submucosal granuloma with eosinophilic infiltration' in 1949.[5] Histologically, these polyps show the presence of vascular and fibroblast proliferation with an eosinophilic inflammatory response. The underlying cause of Inflammatory Fibroid Polyp remains unclear although many factors have been suggested as a trigger such as intestinal trauma or eosinophilic gastroenteritis. Inflammatory Fibroid Polyps are usually asymptomatic and are accidentally identified during endoscopy or laparotomy. In symptomatic cases, the clinical presentation is determined by the anatomic location. Gastric Inflammatory Polyps may present with symptoms of pyloric obstruction or anemia when chronic bleeding is present and when they arise from the small bowel, intussusception is the most common clinical presentation.[6.] Adult intussusception is a very rare cause of intestinal obstruction, accounting for only about 1% of all adult bowel obstructions[7]. About 70% to 90% of intussusception cases are due to benign or malignant neoplasms as lead point and Inflammatory Fibroid Polyps, Lipomas and Adenomas constitute the benign causes of intussusception [7]. Although it has been documented that intussusception can occur without significant pathological cause, it is not a common presentation as that seen in children whereby they are usually diagnosed as intussusception due to idiopathic etiology [8]. Unlike the more common idiopathic intussusception found in children, treatment of intussusception in adults still remains surgical. The surgical approach and procedure depends on factors like the patient's medical history (previous operations, malignancy) and intra-operative findings [9]. The optimal surgical management of intussusception in adult patients is influenced by two major factors: the presence of distinct malignancy and the local factors such as the degree of associated edema, and relative ischemia of the involved bowel. Resection and anastomoses of small intestine was performed in our case as edema was seen limited to the lead point and adjacent bowel wall 20 cm from caecum. However, attempts at local removal of polyps through a limited enterotomy, or a wedge resection through an edematous bowel, is known to be disastrous. It is important that healthy bowel margins must be secured during segmental resection.

VI. Conclusion

Adult intestinal obstruction due to an intussusception is rare and Inflammatory Fibroid Polyp is one of the least common causes of this rare condition. Although these polyps are benign, surgical treatment is the only solution when they present with small bowel obstruction.

VII. Consent

Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

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