

Ileal Inflammatory Fibroid Polyp Causing Ileoileal Intussusception



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ABSTRACT

Inflammatory fibroid polyps are uncommon but well documented solitary polypoid lesions occurring in gastrointestinal tract; most commonly in stomach followed by ileum and rarely in colon, duodenum and oesophagus. Polyps in ileum most commonly present with acute intestinal obstruction as a result of intussusception. We describe one case of inflammatory fibroid polyps of the small intestine causing ileoileal intussusception.

Key words: Inflammatory fibroid polyp, ileum, intestinal obstruction, intussusception

Ileal İnvajinasyona Neden Olan İleal İnflamatuar Fibroid Polip

ÖZET

İnflamatuar fibroid polipler nadir görülen, fakat gastrointestinal sistemde meydana gelen iyi gösterilmiş soliter polipoid lezyonlar dir. En sık mide ve ileum da gözlenmekle birlikte nadiren kolon, duodenum ve yemek borusunda da gözlenmektedir. İleumdan polipler en sık invajinasyona neden olan akut barsak tıkanıklığı ile kendini gösterir. Biz ileal invajinasyona neden olan ince bağırsağın inflamatuar fibroid polip olgusunu sunduk.

Anahtar kelimeler: İnflamatuar fibroid polip, ileum, intestinal obstruksiyon, invajinasyon

INTRODUCTION

Inflammatory fibroid polyp is an uncommon nonneoplastic lesion found in the gastrointestinal tract. Helwig and Ranier (1) introduced the term “inflammatory fibroid polyp” in 1953. IFP(Inflammatory fibroid polyps) can be found in all age groups, but peak incidence is between the sixth and seventh decades (2). The etiology of inflammatory fibroid polyp remains elusive. It is thought to be a result of chronic irritation and inflammation and may represent a peculiar form of granulation tissue formation. It originates from submucosa and grows as a polypoid mass. It is a benign, non-encapsulated submucosal lesion, composed mainly of loose connective tissues, vessels and with an eosinophilic inflammatory component. They can occur throughout the intestinal tract but most frequently in the gastric antrum and small bowel (3).

CASE

A 68 -year-old women was admitted to our hospital with complaints of nausea, vomiting, abdominal pain and distension, which had increased in intensity in recent days. Physical examination revealed tenderness of the right abdomen, with palpable mass. Laboratory tests demonstrated an inflammatory syndrome with fibrinogen at 400 mg/l and C-reactive protein at 200 mg/l. Abdominal X-ray showed dilated small bowel segments. Sonography demonstrated a solid, mobile, homogeneous, echogenic mass surrounded by the typical mural layers of an invaginated ileum. Abdominal computerized tomography (CT) scan demonstrated partial intestinal obstruction in the terminal ileum without generalized small bowel dilatation (Figure 1). Obstruction in the small bowel was suspected, and exploratory laparotomy was performed revealing an invagination completely obstructing the ileal lumen. Segmental resection of the obstructed ileal

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Received: 03.10.2011, Accepted: 23.01.2013

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segment and end to end anastomosis were performed. Macroscopically, the resected ileal segment was 10x5x4 cm in diameter. While opening, a solid, cylindrical-shaped 3.5x2x2 cm mass projecting into the lumen was found (Figure 2). Its surface was covered with ulcerated mucosa and it was sharply demarcated from the nearby normal- in-appearance mucosa. Histological examination of the polyps revealed fibroblast-like spindle cells intermingled with large numbers of mixed inflammatory cells (Figure 3). There were also numerous eosinophils and marked vascularity. Some of the vessels also exhibited thick hyalinised walls. Immunohistochemical staining was positive for vimentin but negative for CD34, C-kit and S-100. A final diagnosis of an inflammatory fibroid polyp was made.

DISCUSSION

Helwig and Ranier¹ introduced the term “inflammatory fibroid polyp” in 1953. The etiology of inflammatory fibroid polyp remains elusive. It is thought to be a result of chronic irritation and inflammation and may represent a peculiar form of granulation tissue formation. The most commonly affected site is the stomach and particularly the gastric antrum (70% of cases) wherein incidence of 4.5% of all gastric polyps has been reported, followed by the small bowel (20% of cases). Rare cases have been described in the rectum, duodenum and esophagus (the distal third being the commonest site) (4). Histologically, IFPs are characterized by vas-



Figure 2. Showing a polyp arising from the Ileum.

cular and fibroblast proliferation with an eosinophilic inflammatory response. The underlying cause of IFP remains uncertain. Many factors have been suggested as a trigger such as intestinal trauma or eosinophilic gastroenteritis (5).

IFPs are usually asymptomatic, identified during endoscopy or laparotomy. When they are symptomatic the clinical presentation is determined by the anatomic location. Clinical presentation is dependent on the size, location or complications of the polyp (4). Epigastric pain and bleeding are the most common symptoms in



Figure 1. Abdominal computerized tomography (CT) scan demonstrated partial intestinal obstruction in the terminal ileum without generalized small bowel dilatation.



Figure 3. Fibroblast-like spindle cells intermingled with large numbers of mixed inflammatory cells.

those of the stomach and in those of the intestine, colicky abdominal pain and obstruction symptoms are the most common symptoms due to induced intussusception. In the oesophagus the rare case of IFPs can present with bleeding, dysphagia or reflux symptoms (4). About 70% to 90% of intussusception cases are due to benign or malignant neoplasms as a lead point and IFPs, lipomas and adenomas are the benign causes of intussusception (6).

Small bowel lesions are not usually diagnosed pre-operatively because they present with vague symptoms of bowel obstruction due to intussusception. Laboratory investigations and plain radiographs are not helpful in making the diagnosis as they will demonstrate non-specific findings that are more in keeping with bowel obstruction (7). Ultrasound has 100% sensitivity and 89% specificity in depicting the intussusception (8). On longitudinal scans, the pseudokidney or hayfork sign is the typical appearance of intussusception. Intussusception can also be diagnosed by CT scan. CT can also help exclude a lipoma (8). The diagnosis is supported by immunohistochemistry where IFPs usually stain positive for CD34 and vimentin. Some IFPs may also stain positive for smooth muscle actin, calponin, CD35 and cyclin-D1 (9). The optimal treatment of adult intussusception is not universally agreed upon. All authors agree that laparotomy is mandatory, in view of the likelihood of identifying a pathologic lesion (10). Most authors recommend a segmental small bowel resection of the invaginated part as surgical treatment of the intussusception.

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