

CASE REPORT

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Ileocaecal Intussusception Due To Inflammatory Fibroid Polyp: A Rare Case Report At District Hospital

Enflamatuvar Fibroid Polibe Bağlı İleoçekal İnvajinasyon: İlçe Hastanesinde Nadir Bir Vaka

ABSTRACT

Inflammatory fibroid polyps are rare quasi tumor lesions that develop from the gastrointestinal tract's submucosa. We present an ileocecal intussusception case as due to IFP in a man aged 47 years who was admitted to a district hospital. Terminal ileum resection with right hemicolectomy was performed for this patient and the mass defined as an inflammatory fibroid polyp in pathological examination.

Key Words:

Intussusception, Inflammatory fibroid polyp, Terminal ileum

ÖZ

Enflamatuvar fibroid polip, gastrointestinal sistemin submukozasından kaynaklanan nadir görülen tümör benzeri bir lezyondur. Yazımızda, terminal ileumda oluşan polipoid kütleyle bağlı ileoçekal invajinasyon gelişen 47 yaşında bir erkek hastaya, kütle görünümünün kansere benze-mesi nedeniyle terminal ileum rezeksiyonuyla beraber sağ hemikolektomi uygulandı. Ancak kütle patolojisinin enflamatuvar fibroid polip olarak raporlanması üzerine olgu sunulmuştur.

Anahtar Sözcükler:

İnvajinasyon, Enflamatuvar fibroid polip, Terminal ileum

INTRODUCTION

Intussusception is described as the invagination of a proximal segment of the intestine into a more distal segment of the bowel. When the distal section invaginates into the proximal segment, this is referred to as retrograde intussusception (1,2). Even though intussusception is a frequent malady in childhood due to lymphoid hyperplasia following viral infections, it is uncommon in adults. Clinical symptoms are cramping stomach pain, bloody diarrhea, and a tangible abdominal mass (2). Adult intussusception is different from pediatric intussusception in terms of clinical symptoms, its causes and in many ways (1-4).

Adult intussusception consists 5% of all intussusceptions, and 1%-5% of all cases of intestinal obstruction.

Inflammatory fibroid polyp (IFP) is an infrequent benign solitary tumor-like lesion that originate from the submucosa of the gastrointestinal tract (GIT) (5). They usually develop in the gastric antrum, yet may appear anywhere in the gastrointestinal tract. The most common place of development for these polyps is the ileal segment, where they trigger intussusception (6). The estimated incidence of IFP is 0.3 to 0.5% in the general population (7,8).

We present a rare ileo-cecal intussusception case due to IFP in a man aged 47 years who was admitted to a district hospital.

CASE REPORT

A man aged 47 years was admitted to the clinic as an emergency case with a history of increasing severity of colic, anorexia, nausea, and bilious vomiting for a month, with no history of abdominal distension. The physical examination revealed muscle defense and rebound pain. No blood or mucus were found on the digital rectal examination. His stools had small volume, were formed. In the last 3 months, he reported nausea, vomiting and intermittent abdominal pain. There was no significant gastric distension. Bowel sounds were hyperactive. The blood pressure was 90/70mmHg, pulse rate was 70 beats per minute, and body temperature was 37°C. Creatinine was 0.6 mg/dl (regular: 0.72-1.25 mg/dl) and protein of C-reactive was 130.20 mg/l (regular: 0-0.5 mg/l) in laboratory tests. 19.89 ml of leukocyte count was revealed by counts of blood cells. (regular: 4.23-9.07 μ l), the hemoglobin level was 12.6 g/dl (regular: 13.7-17.5 g/dl), and a platelet count was 538 μ l (regular: 163-337 μ l). The rest of the serum values were within regular ranges. X-rays of the abdomen and chest were also normal. The CT scans revealed intussusception due to a tumoral mass causing mechanical intestinal obstruction (Figure 1).



Figure 1: The CT scans revealed intussusception due to a tumoral mass causing mechanical intestinal obstruction

The patient was prepared and resuscitated for four hours in order to obtain a satisfactory urine output and laparotomy with a midline incision has been applied. The surgery revealed an ileo-cecal intussusception. The intussuscepted intestinal segment obstructed the intestinal lumen, which resulted with proximal intestinal segment dilatation. Segmental resection of intussuscepted ileocecal valve segment and end-to-end anastomosis have been realized. Resected ileum segment was 12 cm long and the resected colon segment was 28 cm long on macroscopic examination. Histopathological examination shows an IFP measuring 3.5x3x1.5 cm. Its lining mucosal surface was bleeding ulcers. On immunohistochemical analysis, Cytokeratin staining was positive. However, CD34 was negative, CD68 was negative and Ki67 was negative. There were no complications after the surgery. Five days following surgery, the patient was

discharged. The eight-month follow-up period was uneventful.

DISCUSSION

Barbette was the first and Hunter was the second to describe intussusception in the literature. However, Sir Jonathan Hutchinson performed the first surgical intervention in 1871(9). Abdominal CT is currently considered the most sensitive radiological method for confirming intussusception, with a reported diagnostic accuracy of 58%-100%. On CT, a bowel-within-bowel configuration suggested by mesenteric fat and vessels compressed between the walls of the small bowel is pathognomonic of intussusception. In contrast to US, CT is unaffected by the presence of gas in the bowel lumen. Intussusception has always been thought as an illness that affects children and infants since its discovery. Intussusception has been classified according to location, i.e., enteric, colonic, ileo-caecal or ileocolic. Enteroenteric intussusception affects the small bowel, whereas colonic intussusception affects the large intestine. In ileocolic intussusception, the ileum invaginates towards the ileocaecal valve. Adult intussusceptions are more common in the small intestine (50%-88%) compared with the cases in the large intestine (12%-50%) (10). Intussusception may be grouped as primary (idiopathic) or secondary due to underlying etiological causes (benign or malignant lesion). Adult intussusceptions that occur due to a primary or idiopathic cause are most likely to arise in small intestine, accounting for roughly 10% of cases. Secondary intussusceptions are linked to a pathological disease that involves a lead point and is more common in adults. In published literatures, underlying etiology was malignant in ileocolonic and colocolonic intussusceptions meanwhile it was mostly benign in enteroenteric intussusceptions. Thus, the most crucial criteria is the type of the etiology to decide surgical process for an adult patient with no preoperative histological diagnosis. Adult intussusceptions are most commonly caused by benign tumors. IFPs are a rare cause of intussusception among adults (11,12).

CONCLUSION

The appropriate management that best fits to adult intussusception is controversial. Abstractly, surgical reduction prior to resection may allow for more limited resection; nevertheless, the possibility of intraluminal seeding or venous tumor diffusion during lesion manipulation should also be considered. The cause of small intestine intussusceptions, the frequency of malignancy varies between 1% to 47%, with the generality of lesions are metastatic. Recommendation is to perform resection without reduction for primary lesions which are the majority of these type of lesions.

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