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CASE REPORT

Small Bowel Intussusception After Rectal Surgery: Case Report

Rektum Cerrahisi Sonrası İnce Barsak İnvajinasyonu: Olgu Sunumu

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ABSTRACT

Adult small bowel intussusception is a very rare entity. However, it may cause mechanical small bowel obstruction. In this report, a case with small bowel intussusception after anterior resection for rectal tumor is presented. The patient was operated and the invaginated segment was resected. Postoperative evaluation of the resected material revealed no lead point lesion for invagination. Small bowel intussusception should be kept in mind in the differential diagnosis of postoperative ileus.

Keywords: Intussusception, rectal surgery, small bowel

ÖZ

Yetişkinlerde ince barsak invajinasyonu çok nadir görülmesine rağmen barsak tıkanıklığına yol açabilir. Bu bildiride rektum tümörü için yapılan anterior rezeksiyon sonrası gelişen ince barsak invajinasyonu olgusunu sunmak istedik. Hasta cerrahiye alınarak, invajine olan segment rezeke edildi. Çıkarılan materyal incelendiğinde invajinasyona neden olabilecek herhangi bir tetik lezyon bulunamadı. Sonuç olarak, postoperatif barsak tıkanıklığının ayırıcı tanısında spontan ince barsak invajinasyonu da akılda tutulmalıdır.

Anahtar Kelimeler: İnvajinasyon, rektum cerrahisi, ince barsak

Introduction

Intussusception is the second most common cause of acute abdomen in children and most of the cases are idiopathic. However, intussusception in adult patients is a very rare entity.[1] In most of the adult cases there is an underlying pathology like polyp or carcinoid tumors.[1] Most of the cases invagination is a result of pulling by the leading point. The leading point pulls the proximal segment into the distal segment and invagination occurs.

Postoperative ileus can be seen after any abdominal surgery. It mostly represents with nausea, vomiting, abdominal discomfort and constipation. Postoperative ileus can be either paralytic (due to intraabdominal inflammation) or mechanic (due to luminal obstruction by adhesions etc). In most of the cases "wait and see" strategy with nasogastric drainage can be chosen.[2]

Postoperative intussusception is a very rare entity and there are only two cases in literature with intussusception after rectal surgery.[3,4]

Here we present a case with small bowel intussusception after anterior resection for rectal carcinoma.

Case Report

Seventy-one years old male patient admitted to hospital with rectal bleeding. After initial evaluation colonoscopy was performed. At colonoscopy, a 3 cm polypoid mass at rectosigmoid junction was detected. Pathological evaluation revealed adenocarcinoma. Abdominal computed tomography (CT) scan showed no distant metastasis and no lymph node involvement. Anterior resection and primary colocolic anastomosis was performed at operation. Patient stayed stable at postoperative period with no complication. Intestinal

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peristalsis returned at postoperative 2nd day. He had gas and fecal discharge at postoperative 4th day. At postoperative 8th day he has nausea and vomiting. Abdominopelvic CT scan showed ileal intussusception (Figure 1). At laparotomy, there was intussusception at ileum 60 cm proximal from cecum. Fifteen cm of proximal segment was invaginated to distal segment (Figure 2). When the specimen was opened there was no leading point at the invaginated segment (Figure 3).

Discussion

Although, intussusception is the second most common cause of abdominal emergencies in children, it is very rare in adults.[1] In children even all of the cases can be treated by manual reduction.[5,6] However, in adults, most of the cases have a leading point and in more than half of the cases the leading point is malignant.[7,8]

Although it is a significant cause of intestinal obstruction, it is very rare in postoperative period. There are only two cases in literature with small bowel intussusception after rectal surgery.[3,4] The very first case was diagnosed 22 days after the initial surgery. According to authors, the delay was due to lower index of suspicion.[3] In the recent case, intussusception was diagnosed at the postoperative 8th day.

There are several reasons for postoperative ileus. First of all, mechanical obstruction must be differentiated from paralytic ileus. As the recent case has nausea and vomiting with positive bowel sounds, mechanical obstruction was suspected. Intussusception can be diagnosed by ultrasonography or abdominal CT. In the recent case, it would be difficult to evaluate the cause of obstruction due to distended abdomen and surgical wound. Therefore, abdominal CT was chosen. Similarly, both of the cases in literature were diagnosed by abdominal CT.[3,4]

In adult intussusception most of the cases have a leading point. In the recent case, operated for rectal adenocarcinoma, the probability for a second malignancy was high. Therefore,

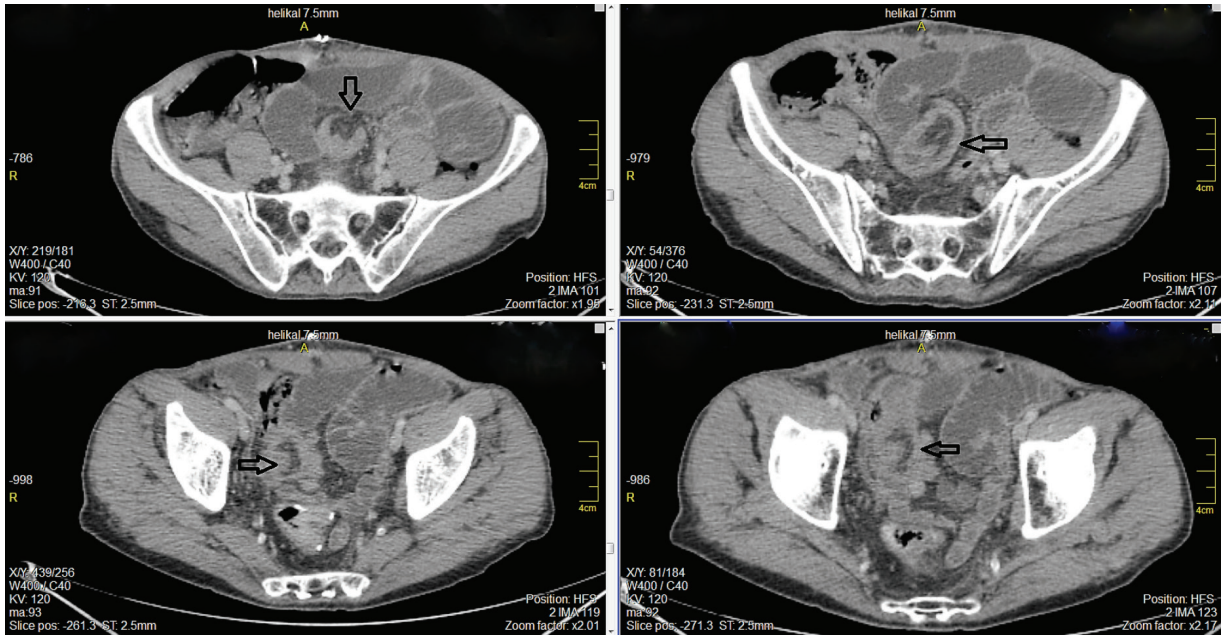

Figure 1. Computed tomography image showing small bowel intussusception

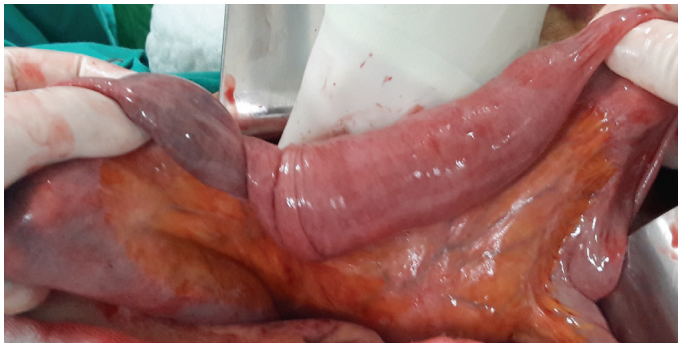

Figure 2. Operative image showing invaginated segment

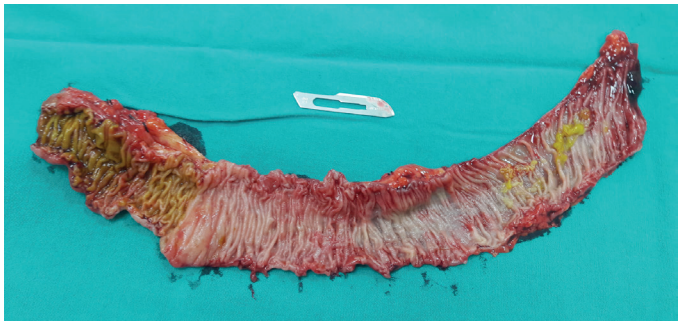

Figure 3. Resected small bowel segment. After opening the material there is no leading point for invagination

surgical intervention was chosen as first step treatment option.

Both of the small bowel intussusception cases after rectal surgery, had no leading point. Similarly, recent case had no leading point. This situation brings into mind the question that; there can be another reason for spontaneous intussusception. Increased intestinal peristalsis due to preoperative bowel preparation or temporary adhesions in the small bowel may have a role.

As conclusion, here we present the third case with spontaneous small bowel intussusception after rectal surgery. Even in adult cases, in differential diagnosis of postoperative intestinal obstruction intussusception should be kept in mind.

Ethics

Informed Consent: Informed consent was taken from the patient.

Peer-review: Internally peer-reviewed.

Authorship Contributions

Surgical and Medical Practices: B.S., S.C., Concept: B.S., S.C., Design: B.S., S.C., Data Collection or Processing: B.S., S.C., Literature Search: B.S., Writing: B.S.

Conflict of Interest: No conflict of interest was declared by the authors.

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