Turk J Gastroenterol 2004; 15 (3): 201-203

Extensive adult colo-colonic intussusception from ascending colon to sigmoid colon: Report of a case

Erişkin olguda geniş kolo-kolonik intusepsiyon: Olgu sunumu

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Intussusception in adults is relatively rare. Here we report a 52-year-old man with an extensive colo-colonic intussusception caused by a polypoid mass in the ascending colon. The mass, which was 10 x 8 x 5 cm in size, had been palpated preoperatively and was suspected to be a sigmoid tumor. The patient was treated successfully by reduction of the invagination and subsequent right hemicolectomy.

Key words: Intussusception, colo-colonic, adult, right colon

Erişkin intusepsiyon nisbeten nadirdir. Burada ascenden kolondaki polipoi kitleye bağlı büyük kolo-kolonik intusepsiyon sunulmaktadır. Kitle 10x8x5 cm çapında ve palpabl idi. Hasta, inuajintsyonun reduksiyonu ve sağ hemikolektomi ile tedavi edildi.

Anahtar kelimeler: İntussepsiyon, kolo-kolonik, erişkin, sağ kolon

INTRODUCTION

Although lipomas are not frequently seen in the gastrointestinal tract, they are the most common nonepithelial benign neoplasms of the colon. Colonic lipomas are of particular clinical importance because they may cause diagnostic problems. We report a case of colo-colonic intussusception induced by an ascending colon lipoma which had been palpated preoperatively and was suspected to be a sigmoid tumor. We discuss here the unusual features presented by this case, including the rarity of the lesion and its location, and we also address the clinical and diagnostic aspects of this infrequent situation.

CASE REPORT

A 52-year-old man presented with diarrhea and intermittent pain in the central abdomen, both of which had been present for the previous six days. The patient also had decreased appetite but no loss of weight. Because his pain was becoming more frequent after meals, he had begun taking a liquid diet. This pain was associated with mild abdominal distension and nausea, but no vomiting. There was no evidence of rectal bleeding. On examination, the abdomen was mildly distended, and a mass, partially mobile and appearing to be approximately 12 x 10 cm in size, was noted in the left lower abdominal quadrant. Rectal examination was normal. Plain radiography of the abdomen demonstrated the presence of hydrogaseous formations in the small bowel and distension of intestinal loops. The clinical impression was that of a possible intra-abdominal malignancy, and the patient was hospitalized with a diagnosis of incomplete intestinal obstruction. Abdominal ultrasonography revealed the presence of endoperitoneal fluid and thickened walls of the intestine, with an apparent mass in the left lower quadrant, suggesting a digestive tract lesion. Ultrasonography of the other abdominal organs revealed no pathology. Chest X-ray, electrocardiography, and laboratory data were normal except for moderately increased levels of serum nitrogen.

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Manuscript received: 05.04.2004 **Accepted: 29.06.2004**

In view of the clinical examination, a decision was made to perform computerized tomography (CT) to further evaluate the mass. Images obtained by CT corroborated the diagnosis of obstruction, and were consistent with an extensive intussusception of the large bowel and a well-defined tumoral mass in the sigmoid colon (Figure 1).

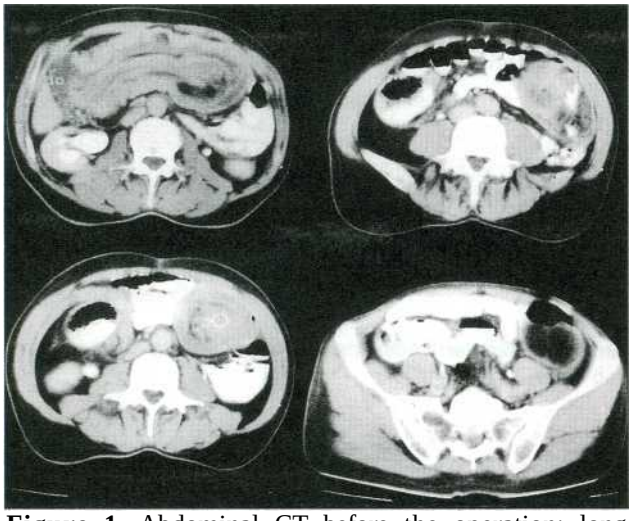

Figure 1. Abdominal CT before the operation: long tract intussusception of the large bowel and tumoral mass in the sigmoid colon

A colonoscopy was planned, but the patient refused any further investigation; he preferred instead to go ahead with a laparotomy because the incomplete obstruction was accompanied by a palpable mass. At laparotomy, a colo-colonic intussusception from the ascending colon to the sigmoid colon was found (Figure 2).

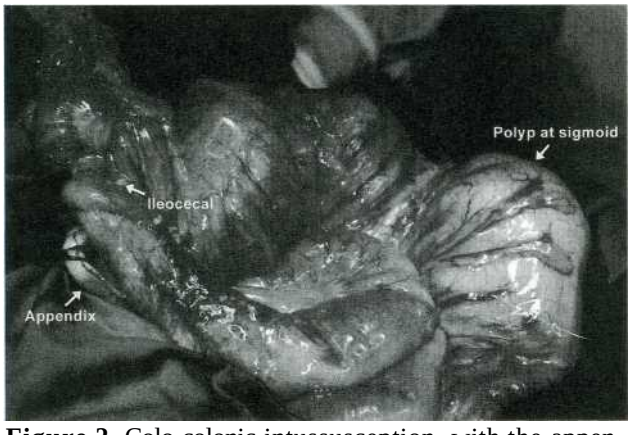

Figure 2. Colo-colonic intussusception, with the appendix at its normal location; the polypoid mass in the ascending colon is palpable at the sigmoid colon

As the apparent cause of the intussusception, the revealed mass was a polypoid structure 10 x 8 x 5 cm in size which was attached to the ascending colon by a 6 cm stalk (Figure 3).

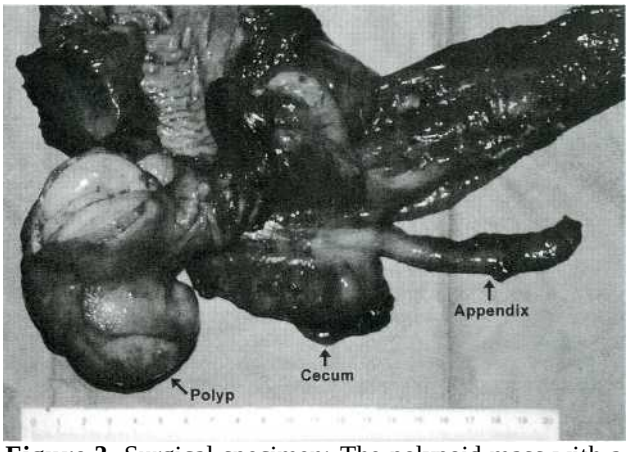

Figure 3. Surgical specimen: The polypoid mass with a stalk in the ascending colon

The patient was successfully treated by reduction of the invagination, followed by right hemicolectomy. The postoperative period was uneventful. Histologic studies showed ulceration on the tumor surface, with the stroma containing mostly fatty tissue, consistent with submucosal colonic lipoma.

DISCUSSION

Adult intussuception is rare and usually caused by organic lesions (1). In adult intussusception cases, 38% - 45% occur in the colon, while 52% - 55% occur in the small intestine (2). Adult colonic intussusception is usually associated with neoplasms, of which 33% - 77% are malignant (3).

Adult intussusception of the colon most often occurs in flexible regions such as the sigmoid and transverse colon and the cecum. Intussusception of the ascending colon, such as that in the present case, has rarely been reported in the literature (4). Although intussusception of the right colon has been reported, to our knowledge there have been no reports of long-tract intussusception from the ascending colon to sigmoid colon.

The symptoms of adult intussusception of the colon vary considerably. The signs and symptoms are often associated with the chronic process of obstruction, and not with acute abdomen (5, 6). As a result, it is difficult to diagnose adult intussus-

ception of the colon, and most cases are diagnosed when patients undergo laparotomy. When ultrasonography shows the typical concentric hyperechoic double ring coupled with thickening of the intestinal walls, a diagnosis of colonic intussusception should be considered (7). CT permits an even more detailed view of suspected intussusception, and thus plays an important role in determining the most appropriate therapeutic strategy.

Radical surgical resection is the definitive treatment for tumor-induced intussusception. Reduction of an intussusception with suspected malignancy should be avoided, since it can cause bowel perforation and tumor cell dissemination. While resection has been assumed to be the most appropriate treatment for intussusception of the colon in adults, it is sometimes possible to reduce intussusceptions by simple manipulation or by compression. With total inversion, partial resection may be necessary; however, when carcinoma is considered peroperatively, an extended resection with lymph node dissection should be performed (8). In emergency cases, the surgeon has to evaluate the need for a resection with immediate or delayed anastomosis, versus a colostomy with deferred resective treatment. The choice of the type of operation may depend on the clinical status of the patient, the condition of the bowel (e.g., whether it is ischemic or not), the site of intussusception and of the tumor, the diagnostic certainty of malignancy, and the experience of the surgeon.

In conclusion, the combination of clinical findings and diagnostic techniques can elucidate the diagnosis of adult colonic intussusception, and the most decisive diagnostic modality appears to be computerized tomography. Surgical resection is the definitive treatment for intussuscepting tumors. However, the choice and timing of the operation depend on the clinical condition of the patient and the status of the intussuscepted bowel.

ACKNOWLEDGEMENT

We thank Greg Hammond of the Louisiana Society of Anesthesiologists for his proof-reading of this manuscript.

REFERENCES

1. Fujino Y, Fujio Y, Shimada E, Okazaki A. Intussusception due to vanishing colon cancer with metastasis of the regional lymph nodes: report of a case. Surg Today 2000; 30(2): 188-90.
2. Schuind F, Van Gansbeke D, Ansay J. Intussusception in adults. Acta Chir Belg 1985; 85(1): 55-60.
3. Lorenzi M, Iroatulam AJ, Vernillo R, et al. Adult colonic intussusception caused by malignant tumor of the transverse colon. Am Surg 1999; 65(1): 11-4.
4. Laredo J, Filtzer HS. Right colonic intussusception. Am J Surg 2000; 179(6): 485.
5. Franc-Law JM, Begin LR, Vasilevsky CA, Gordon PH. The dramatic presentation of colonic lipomata: report of two cases and review of the literature. Am Surg 2001; 67(5): 491-4.
6. Cossavella D, Clerico G, Rosato L, et al. Lipoma of the colon as an unusual cause of recurring partial intestinal occlusion. Clinical case and review of the literature. Minerva Chir 1998; 53(4): 277-80.
7. Alkim C, Sasmaz N, Alkim H, et al. Sonographic findings in intussusception caused by a lipoma in the muscular layer of the colon. J Clin Ultrasound 2001; 29(5): 298-301.
8. Sasatomi T, Oriishi T, Nakano R, et al. Adult colonic intussusception: a case report. Kurume Med J 2001; 48(2): 189-92.