Laparoscopic treatment of colo-colic intussusception secondary to a lipomatous polyp

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INTRODUCTION: Colo-colic intussusception is extremely rare in adults and few cases have been described secondary to a lipomatous polyp.

CASE REPORT: We present the case of a 50-year old man with chronic abdominal pain who was diagnosed a colo-colic intussusception secondary to a lipoma of the left colon. The patient underwent laparoscopic resection of the splenic flexure without reduction, which occurred spontaneously after induction of the pneumoperitoneum, and final histology confirmed a submucosal lipoma with no evidence of malignancy.

CONCLUSION: The traditional treatment of choice for adult intussusception is bowel resection without reduction. More recently, however, preoperative reduction of the invaginated bowel segment has been reconsidered in order to: 1) avoid emergency surgery, 2) allow radical surgery for cancer, and 3) reduce the extent of the intestinal resection. To the best of our knowledge, this is the first case of adult colonic intussusception secondary to a lipoma treated by laparoscopy.

KEY WORDS: Colon, Intussusception, Laparoscopy, Lipoma

Introduction

Intussusception is extremely rare in adults and it is usually secondary to an organic cause. Clinical symptoms are nonspecific and diagnosis is generally based on computed tomography (CT) scanning of the abdomen. The treatment of choice is bowel resection resection. We report a case of colo-colic intussusception in an adult caused by a large lipomatous polyp, which was treated successfully by laparoscopy.

Case Report

A 50-year old man with a 4-month history of vague abdominal pain associated to constipation, and obstipation alternated to diarrhea with mucous discharge was referred to our institution. The past medical history was unremarkable. Physical examination revealed a mild pain in the lower left quadrant. Laboratory tests were in the normal range. Colonoscopy revealed a 3-cm polyp at the level of the splenic flexure, and histology of endoscopic biopsies was negative for malignant cells. Contrast-enhanced abdominal CT scan showed a colo-colic intussusception (target lesion) secondary to a 4-cm lipomatous mass of the left colon (Fig. 1 a,b).

The patient underwent laparoscopic resection of the left colonic flexure (Fig. 2 a,b), and histology of the resected specimen confirmed a 3.5-cm submucosal lipoma with no evidence of malignancy. The postoperative course was uneventful and he was discharged home. At two-month follow up, the patient is doing well, he has no complaints, and reports normal bowel movements.

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Discussion

Colo-colic intussusception in adults is very rare and only very few cases secondary to a lipomatous polyp have been described. About 90% of adult intussusceptions have an organic cause, in the large bowel the most frequent cause is a malignant neoplasm (60%) whereas in the small intestine a malignant etiology is less common (30%) [1,2].

Symptoms are usually chronic, abdominal pain and change in bowel habit are the most frequent complaints, while acute clinical manifestations due to obstruction or bleeding are less common. Intussusception is usually diagnosed at CT scanning of the abdomen, while colonoscopy with biopsy may exclude malignancy [3].

Traditionally, due to the high risk of underlying malignancy, the treatment of choice for adult intussusception is the en-block resection without reduction of the affected segment that can be performed by laparotomy [3,4] or laparoscopy [5]. More recently, however, preoperative reduction of intussusception has been reconsidered in order to: 1) avoid emergency surgery, 2) allow radical surgery for cancer, and 3) reduce the extent of the intestinal resection [6].

In this study, an adult patient with left colon intussusception underwent laparoscopic resection without preoperative reduction, the procedure was safe, effective, and radical. Interestingly, complete reduction of the invaginated colonic segment occurred after induction of the pneumoperitoneum. To the best of our knowledge, this is the first case of adult colonic intussusception secondary to a lipoma treated laparoscopically.

Fig. 1: CT scan shows a fat-density mass (A) and a “target lesion” (B) in the left colon.

Fig. 2: External (A) and internal (B) view of the resected colon.
Riassunto

L’intussuscezione colo-colica nell’adulto è una malattia molto rara e sono stati descritti solo pochi casi in cui era secondaria a un polipo lipomatoso.

Gli Autori presentano il caso di un uomo di 50 anni affetto da dolore addominale cronico al quale è stata diagnosticata un’intussuscezione colo-colica secondaria a un lipoma del colon sinistro. Il paziente è stato sottoposto a resezione laparoscopica della flessura splenica senza riduzione del segmento invaginato che è tuttavia avvenuto a seguito della laparoscopia, il successivo esame istologico ha confermato un lipoma sottomucoso senza evidenza di malignità.

Il trattamento di scelta dell’intussuscezione nell’adulto è stato da tempo considerato la resezione chirurgica senza riduzione. Tuttavia, più recentemente, la riduzione del segmento invaginato è stata riconsiderata per i seguenti motivi: 1) evitare un intervento chirurgico urgente, 2) consentire una chirurgia radicale in caso di neoplasia, e 3) limitare l’estensione della resezione intestinale. Al meglio della nostra conoscenza, questo è il primo caso d’intussuscezione colo-colica nell’adulto causata da un lipoma trattata per via laparoscopica.

References