

Ileo-colonic intussusception secondary to small-bowel lipomatosis: A case report

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Abstract

Intestinal lipomatosis is a rare disease with an incidence at autopsy ranging from 0.04% to 4.5%. Because the lipomas are diffusely distributed in the intestine, most patients are symptom-free, and invasive intervention is not advised by most doctors. Here, we describe a case with intussusception due to small-bowel lipomatosis. Partial small bowel resection and anastomosis were performed because the intestinal wall was on the verge of perforation. This case indicates that regular follow-up is necessary and endoscopic treatment should be considered to avoid surgical procedures if the lipoma is large enough to cause intestinal obstruction.

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Key words: Intussusception; Lipomatosis; Lipoma; Obstruction; Endoscopy

Core tip: Intestinal lipomatosis is a rare disease, ob-

struction due to a large lipoma may result in acute abdomen, and surgical intervention is applied infrequently. When patients are presented with symptoms, endoscopic treatment should be considered.

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INTRODUCTION

Intestinal lipomatosis is a rare disease with an incidence at autopsy ranging from 0.04% to 4.5% and most patients are symptom-free^[1]. Symptomatic cases usually present as paroxysmal abdominal pain, hemorrhage of digestive tract, or abdominal masses. We here describe a case with ileo-colonic intussusception secondary to small-bowel lipomatosis.

CASE REPORT

A 52-year-old woman presented to our outpatient clinic in May 2013 with a history of abdominal pain for 21 d. The patient suffered from persistent abdominal cramps, accompanied by vomiting. The upright plain abdominal film revealed dilated small bowel loops with air-fluid levels. Intussusception was diagnosed by colonoscopy. Computed tomography (CT) scan showed multiple lipomas in small intestine (Figure 1A) and intussusception (Figure 1B). The patient was admitted to the hospital and emergency exploratory laparotomy was performed. During the operation, numerous lipomas 0.3-5 cm in diameter were found diffusely distributed in the intestine and ileo-colonic intussusception due to a large lipoma was confirmed (Figure 2). Partial small bowel resection and anastomosis were carried out because the intestinal

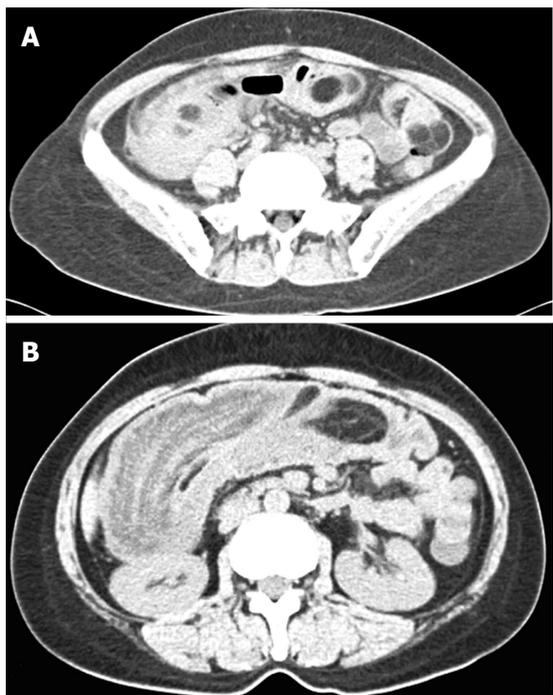


Figure 1 Abdominal computed tomography. A: Abdominal computed tomography (CT) (transverse view) revealed diffuse and multiple intramural fat density masses in the small intestine; B: Abdominal CT showed ileo-colonic intussusception.

wall was on the verge of perforation. Pathological examination confirmed a diagnosis of lipomatosis. Postoperative wound infection and cholecystitis occurred. After dressing change and anti-infection treatment, the patient was discharged in good condition one month later. The patient has remained symptom-free for 3 mo, although a small intestinal double contrast radiography revealed a filling defect in the duodenum and multiple submucosal masses in the small intestine (Figure 3).

DISCUSSION

Primary small intestinal tumors are uncommon, which account for about 1% of all gastrointestinal tumors, and primary lipomatosis of the small intestine is rare^[2]. Diffuse and multiple lipomas in the intestine were first reported by Hellstrom^[3] in 1906. CT and barium examination are useful techniques to confirm the diagnosis. The typical lipomas are usually seen as smooth, nonulcerated filling defects. Most lipomas are small and display no symptoms, and invasive treatment is unnecessary. When patients are presented with paroxysmal abdominal pain, hemorrhage of digestive tract and other symptoms, endoscopic treatment including endoscopic submucosal dissection, endoscopic snare resection and endoscopic unroofing techniques should be considered^[4]. If the lipoma is large enough to cause intestinal obstruction or intestinal obstruction secondary to intussusception as shown in our patient, surgical intervention may be inevitable^[5]. Because the lipomas are diffusely distributed in the intestine, the object of the surgery is not to remove

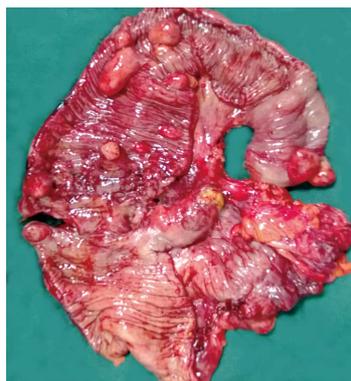


Figure 2 Multiple lipomas can be seen in the gross specimen.



Figure 3 Small intestinal double contrast radiography revealed multiple submucosal masses in the small intestine.

all the lipomas but to relieve the obstruction. During the operation, large lipoma can be dislodged by local resection.

COMMENTS

Case characteristics

This condition may be asymptomatic and abdominal pain is the most common symptom.

Clinical diagnosis

Symptomatic cases may present as abdominal pain, intestinal obstruction, intussusception, volvulus, or bleeding due to mucosal ulceration.

Differential diagnosis

With aid of computed tomography (CT), intestinal lipomatosis can be distinguished from liposarcoma by the homogeneity of its fatty content and absence of areas of increased density.

Laboratory diagnosis

Laboratory testing was not used for this condition.

Imaging diagnosis

Barium studies showed multiple submucosal masses in the small intestine and abdominal CT revealed multiple intramural fat density masses in the intestine.

Pathological diagnosis

Under microscopy, the specimen showed multiple submucosal lipomatous nodules composed of abnormal collections of mature adipose tissue.

Treatment

If intestinal obstruction secondary to intussusception or volvulus occur, surgical intervention should be considered.

Related reports

Endoscopic treatment is recommended to remove the large lipomas to prevent obstruction.

Term explanation

Intestinal lipomatosis is characterized by diffuse and multiple lipomas in the intestine.

Experiences and lessons

Most patients with lipomatosis may be asymptomatic, but when intestinal obstruction secondary to intussusception or volvulus occur, surgical intervention may be inevitable. Endoscopic treatment is ideal in theory, but it is too difficult to perform in most hospitals.

Peer review

Lipomatosis is a rare disease, and intussusception secondary to lipomatosis is even rare. There are few literatures about this disease.

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