

Adult intussusception due to a colonic lipoma

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Abstract

Colonic lipoma is a benign neoplasm that can lead to colonic obstruction but concomitant intussusception is rare in adults. In this case, colocolic intussusception due to a lipoma in descending colon occurred. This was diagnosed using laparotomy, and any intervention to reduce it failed. So resection of the colon with mass and anastomosis were performed. After the surgery and 3 years of follow up, no complications were observed. We present this case, and briefly review the literature of colonic intussusception in adults.

Keywords: Colon; Lipoma; Intussusception; Adults; Obstruction

Introduction

Colonic lipoma is a well-documented benign neoplasm; being more common in childhood (85%-95%) and concomitant intussusception in adults is rare, accounting for approximately 0.1% of hospital admissions and around 10% of all intussusceptions.¹⁻⁸ Adult intussusception does not have any specific clinical manifestations. The majority of adults have a history of prior episodes of intermittent abdominal pain and vomiting for at least 1 month.⁸ The most common presenting symptoms are cramp abdominal pain (71%), nausea and vomiting (68%), and abdominal distention (45%).^{9,10} Patients usually present with signs and symptoms of intestinal obstruction.¹¹ We report a case of colonic lipoma with colocolic intussusception, diagnosed by colonoscopy, computed tomography scans, barium enema and ultrasonography.

Case Report

A 64 year old man was admitted to the hospital for a one year history of epigastric pain, constipation since 40 days before admission, weight loss, vomiting and abdominal distention. Abdominal ultrasonography

showed a rounded 4-6 cm hyperechoic colonic mass. Computed tomography scanning revealed a low-density colonic tumor (Figs. 1 and 2), while barium enema demonstrated a tumor 5 cm in dimension in the descending colon. At colonoscopy, a large, smooth, ulcerated, yellow tumor was discovered in the descending colon together with a submucosal mass that was too large for endoscopic resection. Two days after the CT scan, the patient developed severe left upper and lower abdominal pain. Abdominal ultrasonography revealed a target-like pattern consisting of a round hyperechoic tumor surrounded by the intestinal wall.

Upon surgical exploration, the intussusception could not be relieved and reduced, because the mass was very large and occupied a large segment of descending colon after splenic flexure. So the patient underwent laparotomy and left hemicolectomy. On gross examination, there was a creamy-brownish colored ulcerated polypoid lesion 6x5x3 cm inside the lumen. On the cross section, the tumor appeared yellowish with a soft consistency. Histological examination revealed submucosal tumoral lesion composed of lobulated mature adipose tissue with areas of fibrosis, infiltration of foamy cells and calcifications.

Discussion

Colonic lipoma is the second most common benign large bowel tumor, after adenoma.^{12,13} Tumors located in the right colon, particularly in the cecum, account

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Fig 1: Abdominal CT scan demonstrating lipoma at the neck of the intussusception (arrow).



Fig. 2: Abdominal Cts can revealing the pathognomonic bowel within Bowel configuration with lipoma (arrow)

for 70% of colonic lipoma.¹⁴ Lipomas <2 cm are usually asymptomatic and are usually removable endoscopically,¹⁵ but those greater than 2-4 cm in diameter are more likely to produce clinical signs and symptoms.¹⁴ Furthermore, lipomas >4 cm may produce troublesome symptoms including obstruction or intussusception.^{16,17} Symptomatic large colonic lipomas require surgical intervention.¹⁸⁻²⁴ Adult patients with symptoms of intussusception usually have a neoplasm in the wall of the colon, and usually have large benign lipomas, with two-thirds of tumors in the right colon.²² Those between 4-7 cm in diameter are associated with intussusception.²⁵ Computed tomography scans of colonic lipomas can provide a definitive diagnosis because the mass typically has characteristic fatty densitometric values. However, these features are evident only in large lesions, so smaller tumors are not detected due to artifacts and partial volume averaging.²⁶⁻²⁸

Colonoscopy can usually distinguish lipoma from other tumors. Lipomas appear as smooth, round yellowish polypoid lesions with a thick stalk or broad based attachment. Characteristic features include the 'cushion sign' and the 'naked fat sign'.¹⁶ Rare complications of lipoma such as self amputation and malignant transformation (liposarcoma) have been reported.²⁹ The definitive treatment of symptomatic colonic lipoma is surgical resection. Endoscopic resection is seldom feasible because most colonic lipomas are submucosal. Endoscopic removal of small colonic lipoma with snare cautery has been described but this is a technically difficult procedure with an appreciable incidence of perforation (43%).¹⁵ In summary, the preferred treatment of symptomatic intussusception due to a colonic lipoma is surgical resection without manipulation or reduction before clinical problems are encountered.¹¹

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