

Case Report and Literature Review

Giant Colonic Lipoma with Intussusception in the Adult: A Case Report and Literature Review

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Abstract

Colonic lipoma is a rare benign tumor of the digestive tract. One of the rare complications of this condition, apart from the gastrointestinal bleeding, is the acute intestinal intussusception (AII), which accounts for less than 5% of intestinal obstruction in the adult. Colonic intussusception on lipoma is exceptional. We report a case of colo-colic intussusception on transverse colon lipoma in a 65-year-old man. The patient was asymptomatic. The diagnosis was fortuitous during a colonoscopy taking part in a positive blood test. Biopsies confirmed the absence of malignant lesions. The CT scan showed a large lipoma of the transverse colon with a colo-colic intussusception. The patient underwent a right side hemicolectomy extended to the left. Histological examination confirmed the diagnosis of a benign lipoma tumor.

Conclusion: Secondary colonic intussusception on a lipoma is rarely encountered in the adult. The diagnosis is fortuitous in asymptomatic cases and based on endoscopy associated with abdominal computed tomography. Surgical excision is the chosen treatment.

Keywords: Adult; Colonic Intussusception; Lipoma; Transverse Colon

Introduction

Colonic lipoma is a rare benign tumor of the digestive tract. Colonic intussusception which represents 25% of intestinal intussusception has exceptionally lipoma as a cause [1]. In the adult, lipoma is a very rare cause of intestinal intussusception after an adenoma and endo-luminal malignant lesion [1,2]. We report a rare case of colonic intussusception on a large lipoma of the transverse colon in an asymptomatic adult man.

Observation

A 65-year-old man with a history of ankylosing spondylitis,

hypertension, atrial fibrillation, cholecystectomy, without known allergy, with a large transverse colon lipoma with a transverse colo-colic intussusception is diagnosed by chance during a colonoscopy for a positive blood test. He had no digestive symptoms before. Biopsies showed no abnormality during endoscopy. The physical test found a height of 1m87 and a weight of 101 kg for a BMI (kg/m²) of 28.88. The blood pressure was 110/70 mm/Hg and a pulse of 82 beats/min. The temperature was normal at 37°C. Digestive test was strictly normal. The biological assessment was without abnormality. Endoscopy found a large intra-luminal lesion that could correspond to a lipoma with biopsies that were negative. An abdominopelvic scan noted a large lipoma with an intussusception in the transverse colon (Figure 1).

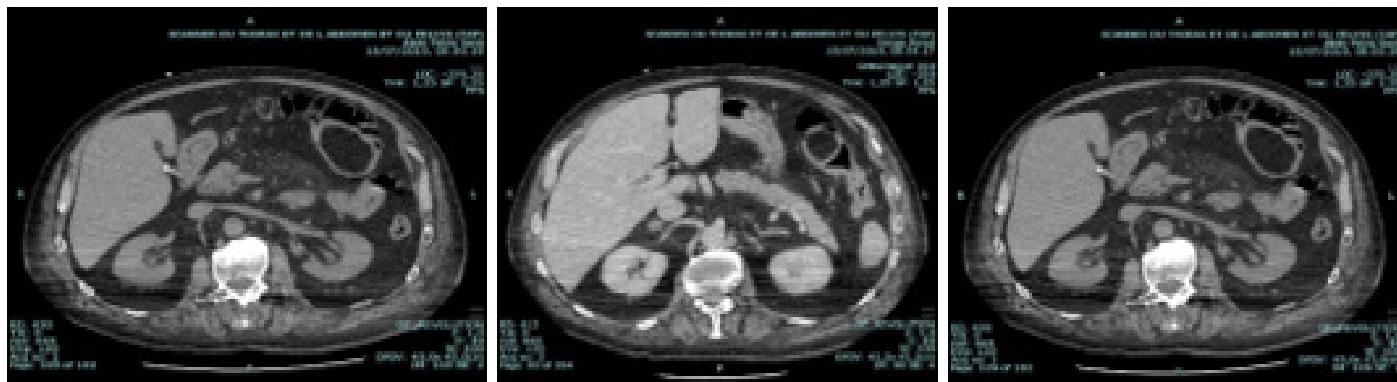


Figure 1: CT showing a large transverse colon lipoma with intussusception.

The patient received a right side hemicolectomy extended to the left with a terminological ileo-colic anastomosis with median laparotomy. There was no peritoneal carcinomatosis or mesenteric lymphadenopathy. The peritoneal fluid was normal in appearance. The macroscopic test of the excision specimen showed the presence of a submucosal yellow ovoid tumor with a soft consistency of 22/6 cm (Figure 2).



Figure 2: Macroscopic appearance of the surgical specimen: rounded mass at opening.

The histological test revealed a benign tumor proliferation of mature adipocytes, lodging in the submucosa without any sign of malignancy, typical of a benign colonic lipoma (Figure 3). The definitive diagnosis was colo-colic intussusception on lipoma. The patient has a good outcome.

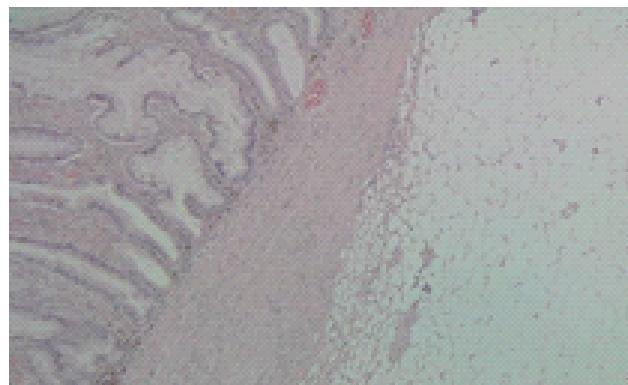


Figure 3: Histological aspect of the surgical specimen: benign tumour proliferation of mature adipocytes lodging in the submucosa without any sign of malignancy.

Discussion

Lipoma is a benign tumor. Colonic localization represents 1.8% of benign colonic lesions and its incidence varies from 0.035 to 4.4% [3-6]. As in our patient, colo-colic intussusception is an exceptional complication and the colo-colic form represents only 5 to 18% of intestinal intussusceptions [4,5]. According to the authors, there is a female predominance and the diagnosis is done between 50 and 60 years [6-9]. The diagnosis of colonic lipoma is fortuitous most often in asymptomatic cases as in our case, during a routine radiological assessment such as colonoscopy or imaging (Computed tomography, ultrasound). Symptomatic cases represent only 6% of colonic lipomas and the nonspecific symptoms frequently encountered are abdominal pain, constipation and rectorrhagia [8-10]. These symptoms are proportional to the size of the tumor and occur from 2 cm [4,6]. Colonic intussusception often occurs from a lipoma size superior to 3 cm [10-12]. About the diagnosis, the difficulty lies in the differentiation with a carcinogenic tumor lesion such as carcinomas and liposarcomas because the surgical treatment is a function of the malignancy or not of the lesion [7,9]. The Computed Tomography of abdomen is the gold standard examen to do the diagnosis but the confirmation is based on histology. The characteristic CT scan image most often found is a cockade image. The lipoma presents itself within the intussusception as a heterogeneous hypodensity [2,11-13]. Less specific and sensitive than the Computed tomography, the ultrasound, and colonic opacification can contribute to the diagnosis of intestinal intussusception on lipoma [11-13].

The frequent site of digestive lipoma is the right colon, the ileocecal junction, rarely the left colon and the stomach [11,12]. In the series of Lebeau et al [2] and that of Léon [1] relating respectively to 20 and 27 cases of digestive intussusceptions, the discovery of a lipoma as the origin of the intussusception was respectively nil and only 1 case. Therapeutically, surgery is the standard treatment and the extent of resection depends on the certainty of the malignancy or not of the lipoma during biopsies [2,12]. In case of doubt, of complication as in our case, or emergency in the symptomatic cases, the segmental resection as the colectomy is indicated and the restoration of the digestive continuity is made according to the local state with regards to the principles of the digestive surgery [1,2,14]. Laparotomy is the first royal surgical approach. For some authors, the endoscopic approach is chosen only for the fixed tumor or for tumor whom the size is less than 2.5 cm [15]. In our case, the hemi-colectomy enlarged by endoscopy were performed because the advantages of laparoscopy as the reduction of outcome's complications, the pains and duration of hospitalization.

Histologically, the lipoma is developed in 90% of cases at the expense of adipocytes of the submucosa and rarely at the expense of those of the subserosa [16]. In the majority as in our case, the lipoma is often alone. The reported multiple cases are about 10% [4,16]. The prognosis is generally good in the absence of signs of

malignancy and complication. No case of secondary degeneration has been reported.

Conclusion

Lipoma is an essentially benign tumor. The preferential digestive localization is the right colon. Intussusception on a lipoma is an exceptional complication. The diagnosis is often fortuitous in asymptomatic cases. The management is essentially surgical. The prognosis is often good.

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