Subserosal cecal lipoma: a rare cause of ileocolic intussusception in adults

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Intussusception is a rare cause of intestinal obstruction in adults and is usually secondary to malignant neoplasms as the pathologic leading point. We present a case of ileocolic intussusception in an adult caused by a large pedunculated cecal lipoma and mobile cecum. The patient was a 45-year-old woman with 3 weeks' history of colicky abdominal pain, hematochezia, and alternating bowel habits. Computed tomography of the abdomen revealed ileocolic intussusception with 7×5 cm low-density mass in the cecum. Right hemicolectomy was performed, and histopathological examination of the specimen confirmed the diagnosis of a subserosal cecal lipoma.

Keywords:
cecal lipoma, ileocolic intussusception, intestinal obstruction

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Introduction

Intussusception in adults is less common than that in pediatric population and is usually caused by malignant neoplasms in up to half of the cases [1]. The presentation of intussusception in adults is variable and nonspecific; the patient may present with chronic intermittent abdominal pain, obstruction, and/or bleeding [2].

Colonic lipomas are rare mesenchymal tumors and their incidence ranges from 0.2 to 4.4% [3]. They occur usually in elderly women and are located mainly in the cecum and ascending colon [4].

The majority of colonic lipomas are small in size and asymptomatic and discovered incidentally during surgery or endoscopy. Only 30% of them reach a diameter of 2 cm or larger, and the patients may present with anemia, constipation, bleeding, diarrhea, abdominal pain, or intussusception [4,5].

We present a case of ileocolic intussusception secondary to a large pedunculated subserosal cecal lipoma and review of the literature.

Case report

A 45-year-old female patient complained of intermittent central colicky abdominal pain since 3 weeks associated with alternating bowel habits, hematochezia, and vomiting. Clinically, a mobile mass was felt in the right side of the abdomen, with mild tenderness over it. Written informed consent was obtained from our patient for publication of this case report and any accompanying images.

The laboratory investigations showed leukocytosis, hypoalbuminemia, and hypokalemia. Contrast-enhanced computed tomography (CT) of the abdomen revealed ileocolic intussusception reaching the ascending colon and a low-density mass about 7×5 cm in the cecum (Fig. 1,2).

Exploratory laparotomy was performed, and we found ileocolic intussusception that was easily reduced. A mass in the cecum was felt. In addition, the cecum and a part of the ascending colon were mobile, and hence right hemicolectomy was performed due to the possibility of being malignant neoplasm (Fig. 3). Histopathological examination of the specimen revealed pedunculated subserosal cecal lipoma as the leading point of intussusception with evidence of traumatic fat necrosis (Fig. 4).

Discussion

Colonic lipomas are rare nonepithelial neoplasms and they were first described by Bauer in 1757 [6]. However, they are the most common mesenchymal tumors of the colon and the third common benign tumor after the adenomatous and hyperplastic polyps [7].

In the majority of cases, they arise from the submucosa and appear as sessile polypoid masses, and rarely they arise from the subserosa and/or appear as pedunculated polypoid masses. They are usually solitary lesions in the

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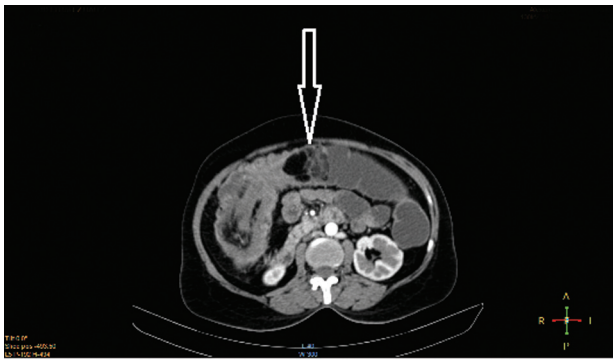
Figure 1

CT Abdomen showing the target sign of ileo-colic intussusception

Computed tomography of the abdomen showing the target sign of ileocolic intussusceptions.

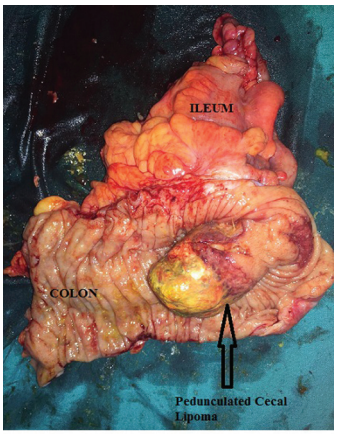
Figure 2



CT Abdomen showing intraluminal fatty mass as the leading point

Computed tomography of the abdomen showing intraluminal fatty mass as the leading point.

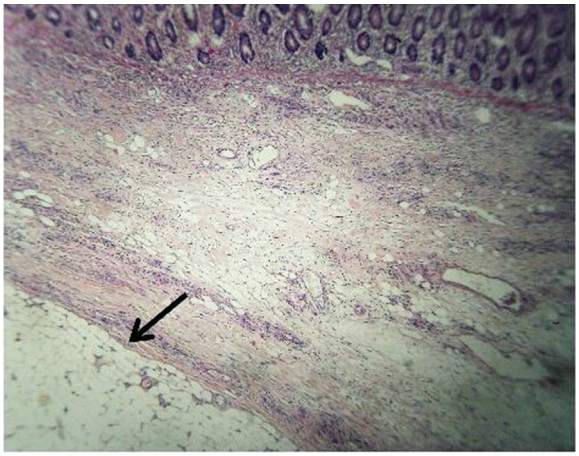
Figure 3



Resected segment of colon showing subserosal cecal lipoma

Resected segment of the colon showing subserosal cecal lipoma.

Figure 4



Subserous mass formed of lobules of mature fat cells x40.

colon and only in 10–25% of cases are multiple lesions [5,8–10].

Paškauskas *et al.* [11] found 37 cases of colonic lipoma causing intussusception after reviewing the English language publications, and we found only four cases of ileocolic intussusception caused by submucosal cecal lipoma and no similar cases of subserosal cecal lipoma causing intussusception after reviewing the English literature using PubMed [12–15].

Abdominal CT is a noninvasive imaging modality that helps in the diagnosis of intussusception caused by cecal lipoma. The radiological features of colonic lipoma are spherical or ovoid mass with sharp margins and low absorption densities of −40 to −120 Hounsfield units [5,16].

Colonic lipoma can be resected by means of either endoscopy or surgery. Endoscopic polypectomy is recommended for small lipomas (<2 cm), whereas colonic lipomas exceeding 2 cm should be surgically removed [11,17].

Surgical options include segmental resection, colostomy with local excision, hemicolectomy, or subtotal colectomy according to the size, location of the tumor, and presence of definite preoperative diagnosis [12].

Conclusion

Intussusception in adults is rare and is usually caused by malignant neoplasms. However, colonic lipoma should be considered in the differential diagnosis. CT of the abdomen is the investigation of choice in the diagnosis of intussusception secondary to colonic lipoma. Surgical approach remains the treatment of choice for large colonic lipoma, and the type of procedure depends on the size, site of tumor, and presence of definite preoperative diagnosis.

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Conflicts of interest
There are no conflicts of interest.

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