



ILEAL SUBMUCOSAL LIPOMA MIMICKING AS PERFORATED DIVERTICULITIS

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Abstract:

We report a case of ileal lipomatosis with diverticulum which was presented as perforated diverticulitis which required emergency surgical procedure after bowel content was aspirated during ultrasound guided percutaneous drainage of diverticulitis. Segmental resection of right hemicolectomy with ileocolic anastomosis was done. Post operatively uneventful.

KEYWORDS:

Ileal Submucosa Lipoma, Perforated Diverticulitis.

INTRODUCTION

Ileal submucosal lipoma is a rare condition with incidence of autopsy about 0.04% to 4.5% and most of cases the are asymptomatic ^(1,2). Less than 33% are symptomatic and presented as intestinal obstruction, intussusceptions, volvulus or less frequently, haemorrhage⁽⁶⁾. We reported a case of ileal submucosal lipoma that presented as perforated diverticulitis. A 60 year-old Chinese lady presented as generalised abdominal pain, fever and diarrhoea which was mimicking as intraperitoneal abscess. The CT abdomen revealed thin-walled irregular outlined lesion containing fluid and air which was suggesting of abscess which was atypical finding for lipomatosis. The patient was underwent ultrasound guided percutaneous drainage of the abscess, Unfortunately it was drained out some amount of faeces and diagnosis of perforated diverticulitis was made. On an exploratory laparotomy, surprisingly, we found an enlarged small bowel with no pus or abscess seen. Patient was treated with segmental bowel resection with anastomosis, which resulted in complete cure.

Case Summary

60 year-old Chinese lady, known case of nasopharyngeal carcinoma with completed chemo and radiotherapy, presented with two days history of abdominal pain associated with vomiting and passing out loose stool. She also complained of abdominal distension with reduced oral intake. The abdominal pain was started from left iliac fossa radiating to whole abdomen. The loose stool was yellowish colour with mucous, fresh blood seen. Otherwise, patient had no loss of weight or appetite. On examination, she was afebrile and haemodynamically stable. Her abdomen was soft, mildly distended with a vague mass over the left iliac fossa. Other examination was unremarkable. White Cell Count was 6.64×10^9 , Haemoglobin was 11.8g/dL and her Platelet count was 385×10^9 . Her Renal Profile was normal and liver function test also normal Contrast Enhance CT Abdomen was done shows large thin-walled irregular lesion containing fluid and air lying in between bowel loops on left side of abdomen and upper pelvis displacing the small bowels to the right and associated loculated homogenous fluid in pelvic cavity. Based on this finding diagnosis of Intraperitoneal abscess was made (Figure 1- 4) Patient was given a course of intravenous antibiotic.

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Subsequently, ultrasound guided percutaneous drainage was done and thick yellowish fluid with foul-smelly and bowel content was aspirated. Diagnosis of perforated diverticulitis was made. Procedure was abandoned and proceeded with emergency laparotomy. Intraoperatively, noted enlarged ileum with intraluminal mass, sized around 10cm in diameter found at 20cm from ileocaecal junction. No pus or blood seen. Right hemicolectomy and ileocolic anastomosis was made. Multiple small lymphadenopathy along the involved bowel was found. (Figure 3-5).

Post-operatively, patient was complicated with Upper GI haemorrhage and secured with endoscopic procedure. Patient was discharged well after one week post operatively. Gross pathological examination of specimen revealed multiple adhesion at the mesentery of the ileum forming loop. Part of ileum showed extensive dilatation measuring 51cm in length and 10cm in diameter. Cut section showed multiple diverticulum within ileum ranging from 2 to 5 cm in diameter. Multiple polypoid out growth noted at the dilated part of ileum. The cut section of polypoid growth showed fat. Cut section of caecum showed diverticulum measuring 2cm in diameter. No lymph node was isolated. Microscopic examination of Histopathological examination showed submucosal polypoid tumour made up of mature adipocytes separated by delicate fibrous network. There was also multiple outpouching of mucosa throughout the muscularis propria. No inflammatory dysplasia or evidence of malignancy. Upon the report, final diagnosis of ileal submucosa lipoma with diverticular disease of the caecum was made.

Discussion:

The term lipomatosis has been used to describe presence of numerous circumscribed multiple lipomas in intestine. Lipomatosis of small bowel was first described by Hellstrom in 1906, and is uncommon^(2,5). 10% of gastrointestinal benign tumor was constituted by lipomas. Their location varies and Ileum is the most common. No gender prevalence has been observed. Average age of onset is 47.3+18 according to previous reported cases⁽⁵⁾. Its etiology remains unknown. The common presentation was intussusceptions or intestinal obstruction whereas the colonic lipomatosis are usually asymptomatic. Gastrointestinal bleeding or malnourished are less frequent presentations. The presenting symptoms are usually abdominal pain. Associated diverticular disease accounts to 40% of cases^(2,5). Even though lipomas are submucosa tumors which do not affect the muscularis propria, they possibly become defect and associated with high prevalence of diverticulosis in this area.

The investigations that may be useful in this pathology diagnosis, include colonoscopy, abdominal CT scan and angiography⁽⁵⁾. However, abdominal ultrasound and barium enema may also be useful in some cases of mid- and terminal ileum tumours^(2,3). These tests may provide diagnosis, when the haemorrhage is not massive and does not require a quick management decision. In cases of massive lower gastrointestinal haemorrhage, angiography or labelled red cells may help to localize the haemorrhage site. Computed tomography (CT) is an excellent imaging technique to differentiate fat from other soft tissue, confirming the fatty nature of these benign tumors, thus avoiding the unnecessary invasive procedure. In lipomatosis, CT usually demonstrates well-defined, homogeneous fatty lesions in the gastrointestinal wall⁽¹⁾. In view of potential complications, awareness of lipomatosis in a patient can be clinically useful. However, in our case report, CT showed large thin-walled irregular outline lesion with air fluid level which suggesting of abscess.

The treatment of the gastrointestinal lipoma is surgical. Removal of the lipoma may be performed by local excision, as in our case right hemicolectomy when it is located in the region of the ileocaecal junction

Our case report was very rare because of its atypical radiological finding which mimicking intraperitoneal abscess. Surgical intervention which is right hemicolectomy was indicated in this patient because of its location. The patient was underwent emergency procedure due to atypical presentation as peritonitis secondary to perforated diverticulitis. This can be avoided if extra investigation such as barium enema or colonoscopy has been performed pre-operatively and elective procedure can be planned. In surgical emergencies such as intussusception, obstruction or massive haemorrhage or absence of accurate diagnosis as found in our case report, aggressive surgical intervention is still indicated.

ILEAL SUBMUCOSAL LIPOMA MIMICKING AS PERFORATED DIVERTICULITIS

Appendix:

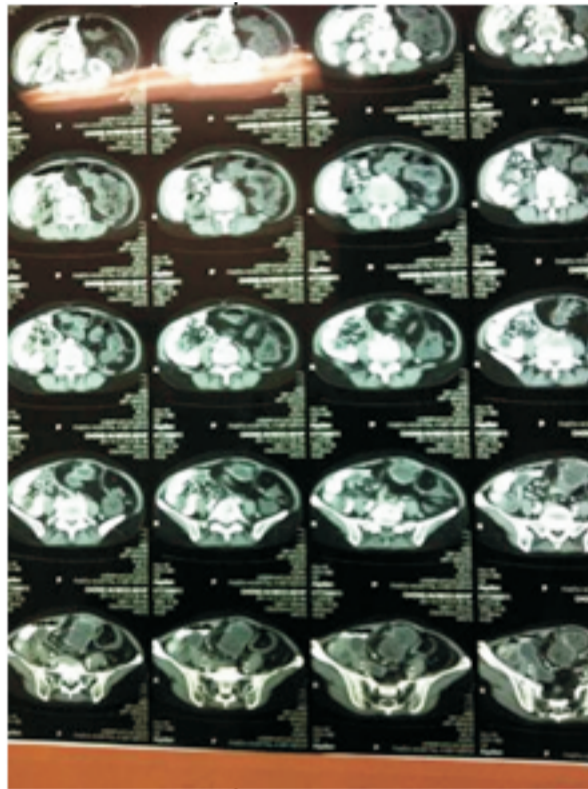


Figure 1

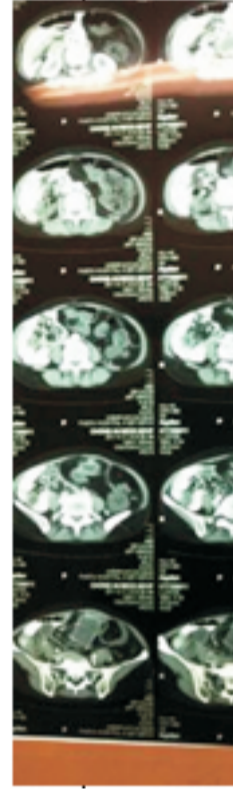


Figure 2

Figure 1-2: large thin-walled irregular outlined lesion containing fluid and air lying in between the bowel loops on the left side of abdomen and upper pelvis displacing small bowels to right and associated loculated homogenous fluid in pelvic cavity.

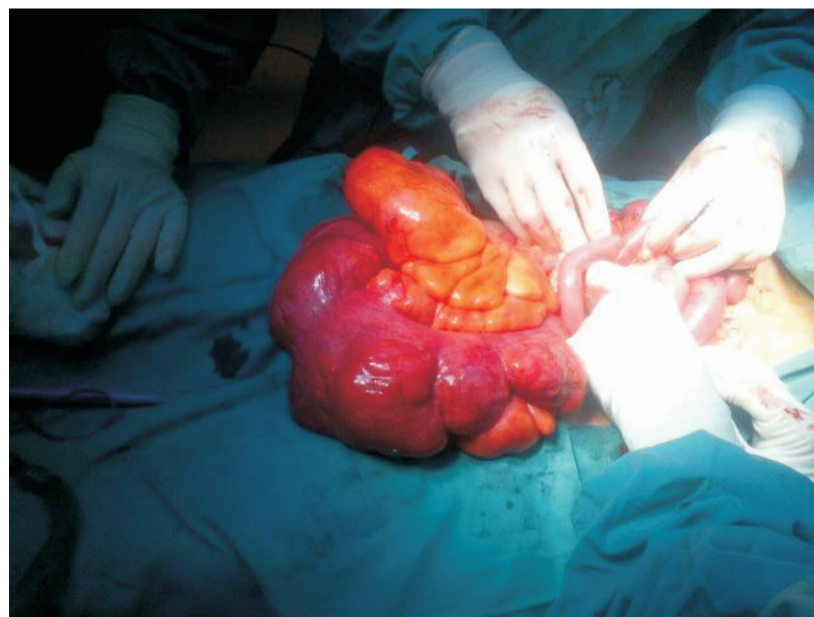


Figure 3

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Figure 4

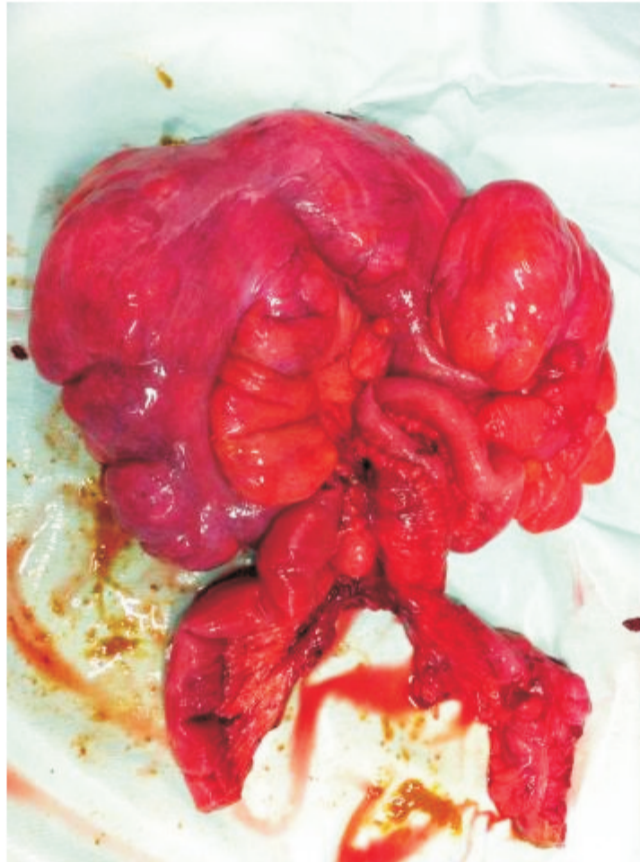


Figure 5

Conclusion

Ileal submucosal lipoma with diverticular disease are extremely rare disease and yet presentation as perforated diverticulitis are very uncommon.

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ILEAL SUBMUCOSAL LIPOMA MIMICKING AS PERFORATED DIVERTICULITIS

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