

Rare Case of Intraluminal Leiomyoma Causing Intestinal obstruction

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Submitted: 22-11-2021

Revised: 04-12-2021

Accepted: 06-12-2021

ABSTRACT –

Leiomyoma is the most common symptomatic benign tumour of small bowel. They represent one subgroup of tumours known as Gastrointestinal stromal tumour (GIST). Although rarely seen, they comprise 20-30% of all benign GI tumours. Diagnosis is difficult because of their rarity and absence of specific symptoms.

This is a case report of intestinal leiomyoma in a patient who was suffering with GI obstruction for one year. The tumour was discovered only after appearance of intestinal obstruction. The patient went laparotomy for intestinal obstruction of unknown etiology. Leiomyoma was diagnosed by pathologic analysis.

KEY WORDS – Leiomyoma, intestinal obstruction

I. INTRODUCTION

Small bowel tumours are rare neoplasms - 3% of all GI tumours (Even though 80% total length and 90% of mucosal surface area of the GIT is small bowel)¹. They are mostly benign and are uncommonly seen in clinical practice². Leiomyomas are the most common of all symptomatic small intestinal tumours, comprising 20-30% of all benign GI tumours.

It is difficult to diagnose leiomyomas because of its rarity. Therefore, misdiagnosis can occur if the careful history and good examination are not performed. The two most frequently presenting symptoms are intermittent GI bleeding and GI obstruction³. Less commonly, one may see

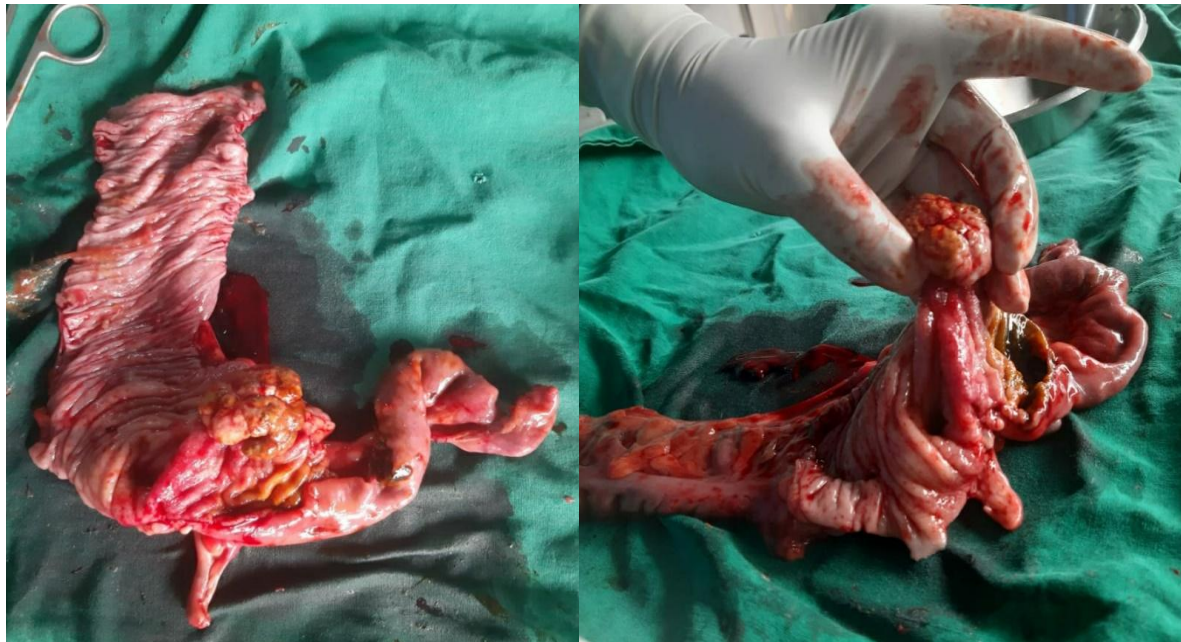
intestinal invagination. In this paper, we report the case of leiomyoma at IC junction causing intestinal obstruction.

II. CASE REPORT

A 14 years female patient was admitted with a one-year history of intermittent attacks of abdominal pain and distension, obstipation and constipation, and few onsets of vomiting. She didn't have any major medical or surgical history.

Physical examination revealed central abdominal distension, tenderness all over abdomen and sluggish peristaltic movements. No significant history of weight loss and palpable abdominal mass was identified. On rectal examination, Rectum was empty. On blood investigations, all investigations were normal except WBC count. There was intussusception (ileocolic) with few enlarged lymph nodes on ultrasound findings.

Three days conservative treatment was given. But patient's increased abdominal pain and distention, required emergency exploratory laparotomy surgery. This revealed a 4*3cm. 8*1.5 cm polypoidal intraluminal tumour as etiology of her invagination and obstruction. Right hemicolectomy was performed after resection of the tumour segment. Histopathology report shows low grade spindle cell neoplasm (differential consideration are 1. Leiomyoma 2. GIST). No any post-operative complications were seen. Patient was discharged in good condition on 12th day after operation.



III. DISCUSSION

Small bowel obstructions are primarily caused by adhesions, hernias, neoplasm or strictures. Tumours of small intestine are rare and generally benign. Leiomyoma comprise approximately one fourth of benign GI tumours and are most common symptomatic benign tumours of small bowel⁴. They are originates from mesenchyma and arise from spindle cells of muscular layer of intestine.

These tumours have a peak incidence between 50-60 yrs. of age. They are found most commonly in jejunum but can also be found in ileum and duodenum. Leiomyomas are usually an incidental finding during unrelated surgery but may be suspected in GI bleeding or intussusception⁵.

Leiomyomas shows four different growth patterns: 1. Intraluminal, 2.intramuram, 3.extraluminal, 4.dumbell shaped. The tumour usually single, firm, grayish-white, well-defined, and encapsulated.

Although most remain asymptomatic, non-specific complaints such as GI bleeding (most common symptom, with 65% frequency), intermittent abdominal pain or chronic anaemia due to occult blood loss may be seen.

In this case, the tumour was located intraluminal at ileum. The patient also has low hemocrit value. Intussusception with intermittent intestinal obstruction is the second most complication, with incidence of 25-45%, especially tumour located in the ileum⁶. Invagination may also cause GI bleeding due to ischemia and necrosis of

tumour. Although our patient was slightly anaemic, her main symptom was obstruction. Sometimes the tumour may enlarge enough to be palpable in an asymptomatic patient.

It is easy to overlook the correct diagnosis in case of leiomyoma because of patient's nonspecific complaints. IDA and Obstructive symptoms should alert the physician to examine the small intestine. An accurate diagnosis should include a good medical history, physical examination, specific imaging modalities such as CT, endoscopy, endoscopic ultrasound and capsule endoscopy. In most patients, the mean period between onset of complaints and diagnosis has been found to be seven months^{5,6}. However, the patient in this case report was correctly diagnosed after one year.

CT is very successful in detecting both primary and metastatic lesions and can show 90% of leiomyomas. While CT cannot differentiate benign from malignant tumours, malignant behaviour can be assessed by size and biological behaviour⁶. Leiomyomas are sharply defined spherical or ovoid masses of homogeneous density and show contrast enhancement. They are seen as oval or round filling defect on barium studies, except extraluminal lesions, which may not be detected unless they are quite large^{7,8}. Sometimes central necrosis can be seen, making the differentiation more difficult.

The most reliable method of evaluating the malignancy potential of these tumours using histopathologic evaluation is by notable absence of

mitosis. Mitosis is the most important criteria of malignancy⁹.

In summary, early diagnosis of leiomyomas correlates with good prognosis for patients. A thorough evaluation is imperative to prevent late diagnosis of leiomyoma and resulting sequelae.

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