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A Rare Case Presentation of Leiomyoma of Jejunum

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Abstract: ***Leiomyomas are benign tumours consisting of predominantly smooth muscle cells and fibrous connective tissue. Leiomyomas arising from the small bowel are rare, accounting for approximately 1% of smooth muscle tumours of the small bowel and involve the jejunum (44%),the ileum (37%) and less commonly, the duodenum (19%). Although most patients are asymptomatic, symptomatic patients are likely to present with abdominal pain, bleeding per rectum and acute intestinal obstruction with or without intussusception. A 60 year old male patient presented with chief complaint of mild, intermittent, localised periumbilical pain, mild grade fever, anorexia and weight loss. Patient has no complaint of nausea, vomiting, bleeding per rectum or altered bowel-bladder habit. CECT Abdomen showed report suggestive of asymmetrical heterogeneously enhancing thickening in left lumbar region possibly arising from jejunal loops with gall stone. Exploratory laparotomy via midline incision done and resection of mass containing bowel done followed by anastomosis done. Microscopic and histological examination along with IHC markers confirmed the diagnosis of leiomyoma of jejunum.***

Keywords: leiomyoma of small bowel -jejunum

1. Introduction

Benign small intestinal neoplams account for 1-6% of all gastrointestinal neoplasms. Leiomyomas constitute 20-30% of all benign gastrointestinal tumors They are the most common of all small intestinal tumors producing symptoms, and the most frequent benign tumor in the small intestine.

The peak incidence is in the sixth decade of life and both sexes are affected equally. They can be found as an incidental finding in autopsies. However, in other occasions symptoms appear and they range from bleeding to abdominal pain to acute abdominal condition such as obstruction. They must be treated with surgery and a wide resection is mandatory.We report a case of leiomyoma arising in jejunum which caused no specific symptoms.

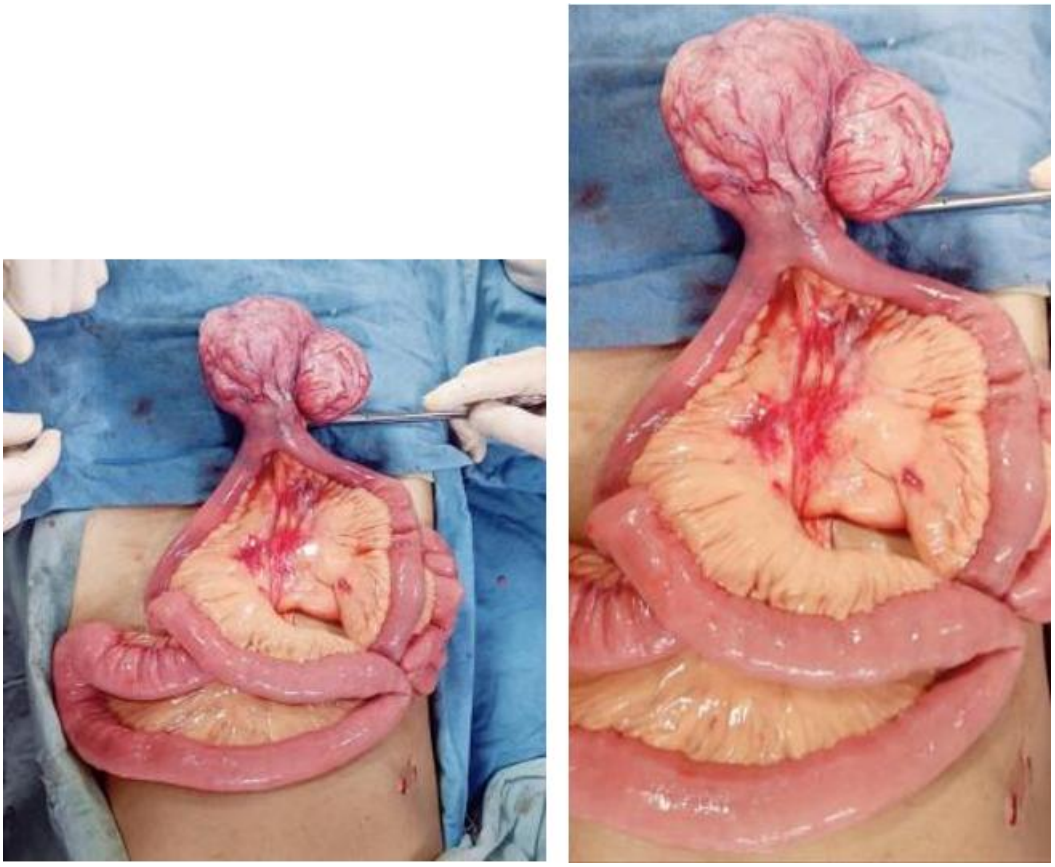
2. Case Presentation

A 60 year old male patient presented with chief complaint of mild, intermittent, localised central abdominal pain since 1 month. Patient had history of episode of mild fever. There was no other complaints with no comorbidities and patient was hemodynamically stable.

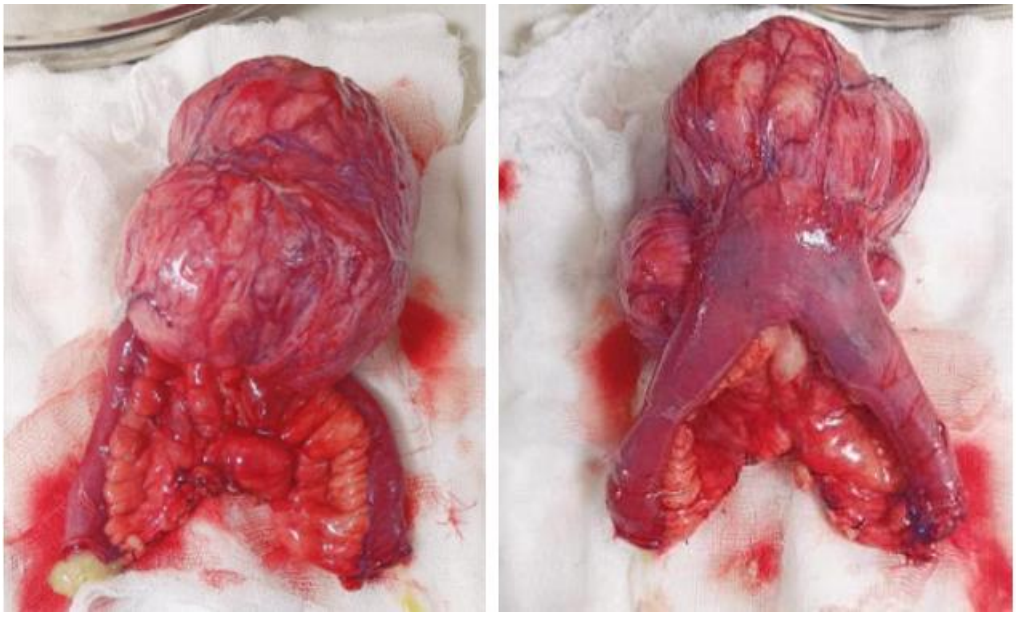
On examination abdomen was flat in shape with centrally placed umbilicus with no scar marks, no dilated vein, no visible peristalsis or pulsation. On palpation local temparature was normal with no tenderness. On deep palpation no guarding, no rigidity or no lump was found.

All hematological investigation were within normal limits and CECT was done which suggestive of - asymmetrical heterogeneously enhancing thickening with maximum thickness 4 cm noted involving left lumbar region possibly arising from jejunal loops associated with a branch from superior mesenteric artery as feeding vessel with gall stone.

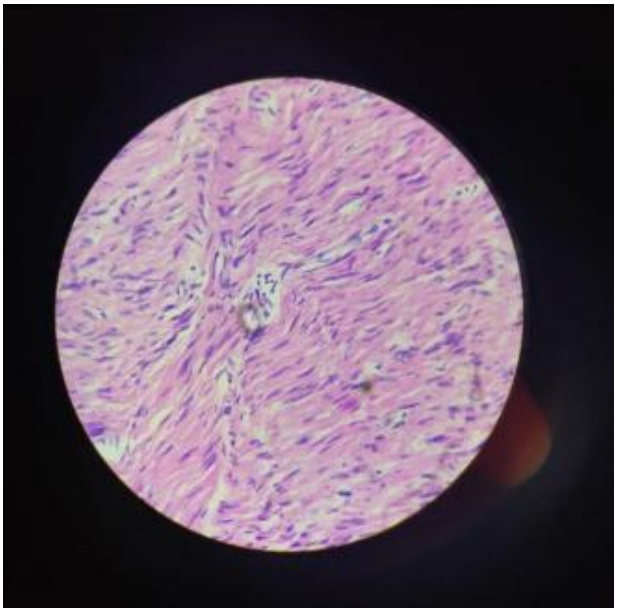
Exploratory laparotomy was done through midline incision and thorough bowel examination followed by mass found at antimesentric border of jejunum 15 cm distal to duodeno-jejunal flexure followed by resection and side to side stapler anastomosis of jejunum done and specimen sent for histopathological examination. Immunohistochemistry was performed and it suggestive of leiomyoma of jejunum. Post operative stay was uneventful and patient discharged on post operative day -14.



Identification of mass arising from Antimesenteric border ofjejunum.



Resected part of mass with jejunum



Histopathological photo of specimen suggestive of leiomyoma.

3. Discussion

Leiomyoma occupies the fourth place of all small intestinal tumors after lymphoma, adenocarcinoma and leiomyosarcoma. According to Good (1963), and Bruneton (1981), jejunum is the most frequent location of leiomyoma, followed by ileum and duodenum. Leiomyomas have also been reported in appendix and Meckel diverticulum.They remain silent for many years, and when symptoms appear they are varied: bleeding (59-70%), abdominal pain (66%) and acute intestinal obstruction (8- 13%). Palpable mass has also been documented, especially in case of leiomyosarcoma. Some authors have associated leiomyomato intestinal atresia.

Diagnosis is performed by medical history, physical exam, barium swallow, CT, endoscopy, angiography and capsule endoscopy. CT is a useful tool. Leiomyomas are displayed as ovoid or spheric masses of homogeneous density and provide contrast enhancement. This is an excellent method for distinguishing between leiomyosarcoma and leiomyoma. Leiomyoma, and not leiomyosarcoma, must be considered if size does not exceed 6 cm of size across and no metastases are proven. However, the definitive diagnosis will be carried out with an adequate histopathological study.

According to Skandalakis and Gray (1964), leiomyomatosis neoplasms of small intestine are originated in either the circular or longitudinal muscular layer, or muscularis mucosae.

It is important to do adequate inmunohistopathological study in order to differentiate leiomyoma from GIST. Leiomyomas show positive stain for actin and deeming or negative CD 34 and CD 117. However, GISTs present positive CD34 and CD117. Leiomyomas can be classified into three groups: benign, malignant and, between both of them, a third category called leiomyoblastoma which is not considered a malignant neoplasm. Albeit lymph nodes and hepatic metastases have been reported in some of the cases. Malignancy is determined by the number of mitoses. If it exceeds 10 per high per field, malignancy is an assumption.

The diagnosis of benign nature is made by number of mitosis below 10, and a 2 year free disease period. Four patterns of growth have been described: intraluminal, intramural, extraluminal and dumbbell shaped. In the small intestine, the most frequent type is extraluminal followed by intraluminal. We report a case of intramural growth.

Treatment is surgery to avoid the risk of malignancy in the future. Wide resection is mandatory due to the tendency to recur locally even after many years. Prognosis of leiomyomas after surgery is excellent.

4. Conclusions

Leiomyomas are infrequent tumors and few cases have been reported. Wereport an interesting case of leiomyoma which presented with no specific symptoms.The case highlights that leiomyoma can be asymptomatic and So these tumors must be considered in the differential diagnosis of mass arising from small intestine.

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