



Leiomyoma of Jejunum-A Rare Cause of Acute Abdomen

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Abstract-

Leiomyomas are benign smooth muscle neoplasm. Commonest site for leiomyomas is uterus. Small intestinal leiomyomas are rare. Only 3%-6% of gastrointestinal tumors arise from small bowel. Leiomyomas of small bowel are mostly asymptomatic and found incidentally at surgery or autopsy. We report a case of benign jejunal leiomyoma presented as acute abdomen surgical emergency.

Key words- small intestine, benign tumor, acute abdomen.

Introduction

Neoplasm of small intestine constitutes less than 2% of all body tumors (1). Benign tumor of small intestine constitute 10% of all benign neoplasm of gastrointestinal tract & 30% of all neoplasm of small intestine(2,3). Benign tumors of small intestine are lipoma, leiomyoma, adenoma, hemangioma, fibroma & hamartoma(4,5). Leiomyomas of small intestine presents in all age groups, mean age of presentation is fifth decade of life. We report a case of jejuna leiomyoma presenting as acute abdomen.

Case Report

A 56 year male was admitted in surgical emergency ward with severe nausea, vomiting & dull pain in abdomen. There was no history of constipation & rectal bleeding. On physical examination generalized tenderness of abdomen was present along with feeble bowel sounds. Patient was managed conservatively for 48 hours but the symptoms worsened. So an emergency explorative laprotomy was done . which revealed a tumor in the jejunum. Tumor was resected and was given for histopathological examination.

Grossly tumor was measuring 12×8 cms in size. Firm in consistency, smooth outer surface with vascularization(figure1).

Microscopic examination showed normal jejuna mucosa(figure 3)



Figure 1) Gross appearance of tumor

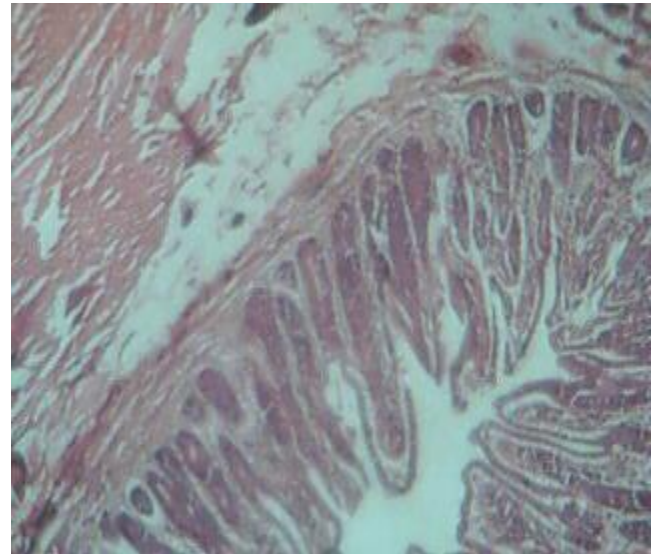


Figure 3) Photomicrograph of jejunum showing normal mucosa & interlacing bundles of spindle shaped or stellate smooth muscle cells with blunt ended pale staining nuclei. No mitotic activity were present (figure 4,5,6). Based on this histological picture a diagnosis of leiomyoma of jejunum was made.

Cut surface was grayish white with whorling appearance(figure 2)



Figure 2) Cut surface of tumor

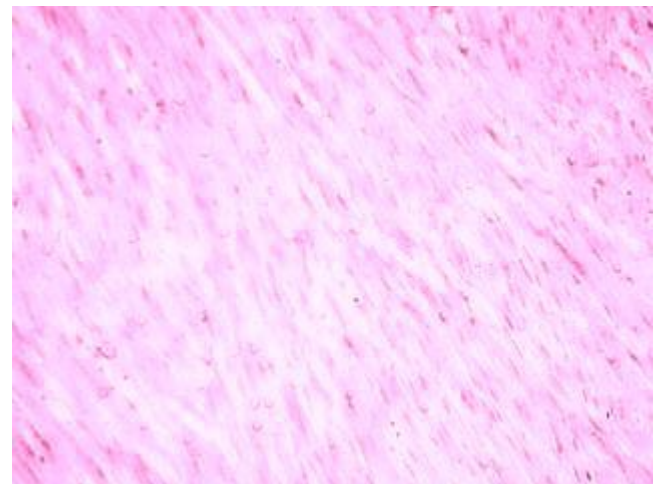


Fig: 4

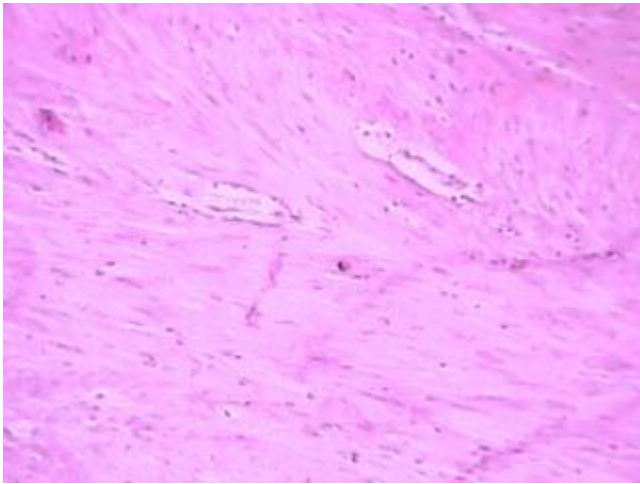


Fig 5

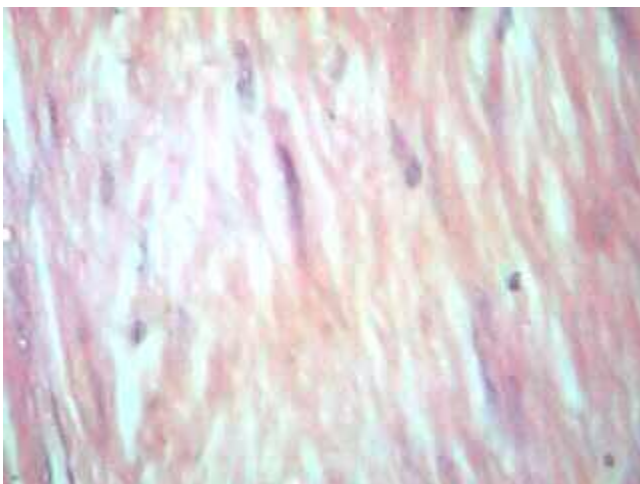


Figure 4,5,6) Photomicrograph showing benign spindle shaped cells(10x,40x,100x)

Discussion

Leiomyomas are most common benign tumors of small intestine. Commonest site in small intestine is jejunum followed by ileum & rarely in duodenum. These leiomyomas can be intraluminal, intramural, extraluminal and dumbbell shaped(6). Preoperative diagnosis of leiomyoma of small bowel is difficult because of their rare occurrence and lack of any pathognomic sign. The sign & symptoms of leiomyomas are vague and are frequently similar to other gastrointestinal manifestations as a consequence these lesion often go untreated for prolonged periods. Preoperative diagnosis of leiomyoma should include appropriate imaging. Preoperative CT scan can show 90% of leiomyomas. Jejunal leiomyomas can occur at any

age, have a peak incidence in fifth decade with male predominance. Although most of the tumor remain asymptomatic ,most common symptom is gastrointestinal bleeding followed by intermittent intestinal obstruction(7,8). Our patient was male and presented in fifth decade of life with acute abdomen & history of off & on abdominal pain especially after ingestion of food. All the leiomyomas should be carefully ruled out for GIST(gastrointestinal stromal tumors). Histopathologically leiomyomas are benign tumors & mitosis is the most important criteria for discriminating it from GIST(10). They are negative for CD117 & CD34, and positive for smooth muscle desmin & actin. Distinction of the two tumors is important because leiomyoma not GIST, can be treated by simple enucleation.

Strict follow up of these tumor should be made due to the uncertain potential of GIST. In small intestine leiomyoma this potential is 10-20%(9).

References

- 1) Norberg KA, Emas S. Primary tumours of small intestine. *Am J Surg* 1981; 142(5): 569-573.
- 2) Giuliani A, Caporale A, Teneriello F, Alessi G, Serpieri S, Sammartino P. Primary tumours of the small intestine. *Int Surg* 1985; 70(4): 331-334.
- 3) Zhang WL. Primary tumour of the small intestine. Analysis 102 patients. *Zhonghua Zhong Liu Za Zhi* 1988; 10(5): 370-2.
- 4) Burgos AA, Martinez ME, Jaffe BE. Tumours of the small Intestine. In: Zinner MJ, Schwartz SI, Ellis H: *Maingot's abdominal operations*, Vol. I, Tenth ed. Appleton & Lange, Connecticut 1997, pp 1173-1184.
- 5) González J, Marco A, Andújar M, Iñiguez L. Myoepithelial hamartoma of ileum: A rare cause of intussusception in children. *Eur J Pediatr Surg* 1995; 5(5): 303-304.
- 6) Scherjon S, Lam WF, Gelderblom H, Jansen FW. Gastrointestinal stromal tumor in pregnancy: a case report. *Case Rep Med* 2009; 2009: 456402.
- 7) Gill SS, Heuman DM, Mihas AA. Small intestinal leiomyomas. *J Clin Gastroenterol* 2001;33:267-282.

8) Blanchard DK, Budde JM, Hatch GF. Tumors of small intestine. World J Surg 2000;24:421-9.

9) Ozguc H, Yillmazlar T Yerci o. Analysis of prognostic and immunohistochemical factors in gastrointestinal tumors with malignant potential. J Gastrointest Surg 2005;0:127-41

10) Abrahm SC. Distinguishing gastrointestinal stromal tumors from their mimics: an update. Adv Anat Pathol 2007; 14: 178-88.