

Duodenal Leiomyoma: A Rare Cause Of Gastrointestinal Haemorrhage

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Citation

S Sahu, S Raghuvanshi, P Sachan, D Bahl. *Duodenal Leiomyoma: A Rare Cause Of Gastrointestinal Haemorrhage*. The Internet Journal of Surgery. 2006 Volume 11 Number 2.

Abstract

Benign neoplasms of smooth muscles of the duodenum are a rare condition.

A 60-year-old male presented with recurrent history of melaena. Upper GI endoscopy showed a smooth bulging in the second part of the duodenum. Contrast enhanced CT scan of the abdomen showed a lobulated duodenal wall thickening in the second part of the duodenum causing luminal distortion without any exoenteric component and local infiltration, suggestive of leiomyoma.

Awareness and proper evaluation of patients with upper gastrointestinal bleeding may help in diagnosing this rare condition.

INTRODUCTION

Leiomyomas are benign neoplasms of smooth muscles that commonly arise in tissues with a high content of smooth muscles such as uterus.

CASE

A 60-year-old male presented with recurrent history of malaena and pain in the upper abdomen since one year. Examination revealed a moderate degree of pallor and tenderness in the right hypochondrium. Investigations showed a haemoglobin of 7.5gm/dl, a total leukocyte count of 9500/cu.mm and a differential count with neutrophils 63%, lymphocytes 31%, eosinophils 4% and basophils 2%. Liver and renal function tests were within normal limits.

Upper GI endoscopy was planned which showed a smooth bulging in the second part of the duodenum. Endoscopic biopsy of the lesion showed normal duodenal mucosa. Contrast enhanced computed tomography of the abdomen showed a lobulated duodenal wall thickening in the second part causing luminal distortion without any exoenteric component and local infiltration, suggestive of a leiomyoma (Fig.-1).

Figure 1

Figure 1: Contrast enhanced computed tomography of the abdomen showing duodenal wall thickening in the second part.



The patient was advised surgery but he refused and left against medical advice.

DISCUSSION

The most common benign neoplasm of the upper gastrointestinal tract is leiomyoma accounting for about 30% of all tumors. The commonest site of leiomyoma in the gastrointestinal tract is the stomach (61.5%) followed by the jejunum (19%). Duodenal leiomyomas are rare and occur in

5% of cases.^{1, 2}

The common age of presentation of duodenal leiomyoma is between the sixth and seventh decade of life and there is a slight male predominance. Most of these lesions are small submucosal tumors with a maximal diameter ranging from 1 to 3.6cm.³

Duodenal leiomyomas are usually asymptomatic but may also present as gastrointestinal bleeding (most common), abdominal pain, mass or obstruction.^{1, 4, 5, 6, 7, 8}

The sensitivity of contrast radiography in identifying the lesion is 60%. The typical radiographic sign is an intraluminal-filling defect with a central umbilication, caused by sloughing or ulceration of the mucosal surface of the tumor.³

Angiography has been reported to be in use in both diagnosing and treating this lesion.⁹

Computed tomography is useful in diagnosing duodenal leiomyomas, particularly in the region of the ampulla. Magnetic resonance imaging may be of value in such patients.^{10, 11}

The most sensitive method of identifying these uncommon tumors is endoscopy. However endoscopic biopsy may yield normal duodenal mucosa since the tumor is situated in the submucosa. Endoscopic ultrasonography has a greater sensitivity than computed tomography or intraluminal contrast studies for visualizing these submucosal tumors.^{3, 12, 13}

Surgical treatment modalities for such small tumors include longitudinal duodenotomy with local tumor excision and primary duodenal closure. Pancreaticoduodenectomy (Whipple's procedure) is reserved for large tumors, where there is a doubt of malignancy or when the ampulla of Vater or the pancreas is involved. Recently, pancreas-sparing duodenectomy has been advocated in infra-ampullary duodenal leiomyomas, avoiding unnecessary resection of the pancreas along with the morbidity associated with bilio-enteric and pancreatico-enteric anastomoses traditionally done in Whipple's procedure.^{3, 4, 5, 7, 14}

Frozen section examination should be performed for tumor invasion, cytological features and size to exclude any malignant changes.³

Awareness and proper evaluation of patients with upper gastrointestinal bleeding may help in diagnosing this rare condition.

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