

Leiomyoma of Duodenum

A Case Report

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Summary: A case of leiomyoma of duodenum treated by pancreatoduodenectomy is reported and the relevant literature is discussed.

Introduction

The occurrence of leiomyoma in the duodenum is rare.¹ Out of a total of 1704 cases of small bowel benign tumours reported in the literature till 1974, 367 were located in the duodenum and of these only 73 were leiomyomas.² Because of their rarity, slow growth and insidious symptoms, the diagnosis of benign small bowel tumours is often delayed.^{2,3}

Case Report

A 50-year old Malay female presented with a painless upper abdominal mass of three years duration. She was feeling anorexic and lethargic for about six months. There was no history of vomiting and colonic symptoms were absent. Examination revealed a thin anaemic lady with an intraabdominal mass of 5 x 7.5 cms., to the right of midline around the transpyloric plane. It was mobile in the oblique axis and was ballotable. Visible peristalsis was absent. Investigations: HB% 9.6gms./dl. Stool occult blood was negative. Blood urea, electrolytes, liver function tests, plain X-ray abdomen and chest were normal. On ultrasound scan, "A solid mass of 4.8 x 8.5cms. was seen below the liver. The organ of origin of the mass could not be determined. The gall bladder was not seen, probably displaced up by the mass. The pancreas was not visualised, the liver and right kidney were normal."

With the clinical diagnosis of a mass arising from mesentery or omentum, laparotomy was done through a right paramedian incision. A firm, smooth tumour of about 10cms. diameter from the second part of duodenum was found, displacing the duodenum forwards and the right kidney downwards. It was extending mainly to the right of the C-loop while medially it was closely applied to the head of pancreas and did not show any softening or infiltration into the surrounding structures. The gallbladder and common bile duct were normal. On duodenotomy, the mucosa was seen stretched over the mass which was growing mainly extraluminally. With the diagnosis of leiomyoma and in view of its large size and close relation to the head of pancreas, pancreatoduodenectomy was done and the continuity restored by choledochojejunostomy, anastomosis of pancreatic duct to jejunum and anterior gastrojejunostomy (Fig. 1). Postoperative course was uneventful. Histopathology revealed leiomyoma. The patient is under follow-up for the past one year and is well.

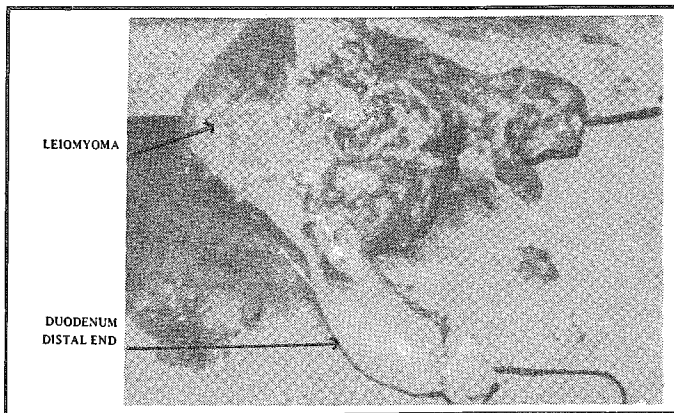


Fig. 1:
Resected Specimen of Leiomyoma
of Duodenum.

Discussion

The peak incidence of small bowel leiomyomas is in the fifth decade of life and the sex incidence is equal. The tumour can grow mainly extraluminally (exophytic), intraluminally (endophytic), or assume a dumbbell shape.² Extraluminal tumours tend to be larger and asymptomatic for obvious reasons.³ Leiomyomas can undergo malignant transformation.¹ Presenting symptoms (in order of frequency) are bleeding (melena or haemetemesis, the latter in duodenal lesions), abdominal pain, obstruction (due to luminal narrowing or rarely intussusception) and weakness (chronic blood loss). Twenty five percent of small bowel leiomyomas present as abdominal mass with or without symptoms. The more proximal the lesion, the greater the frequency of positive findings in gastro intestinal contrast radiography. Endoscopy in duodenal lesions, selective angiography in massive intestinal bleeding, ultrasound in CAT scan in exophytic lesions are useful.

Histopathological confirmation of malignancy is difficult. Multiple factors like size of tumour (> 5 cms.), mitotic figure (> 1 per high power field) and growth pattern (multiple nodules with varying consistency, infiltration into surrounding structures) may indicate malignancy but all are not absolute. In an individual case, these factors have to be considered along with clinical behaviour.

Surgery is the treatment of choice. The type of operation depends on location of the tumour, size and surgeon's impression on the possibility of malignancy. Frozen section is not reliable. Small duodenal lesions, excluding periampullary tumours are dealt by segmental resection. Larger lesions in any location in the duodenum require pancreatoduodenectomy. Small periampullary tumours without any features of malignancy can be enucleated. Jejunal and ileal leiomyomas are removed by segmental resection, with wide margin of mesentery if malignancy cannot be excluded.³

In the case reported, due to its long duration, slow and exophytic growth, the tumour by displacing the surrounding structures and stretching the overlying peritoneum had acquired good mobility and hence was mistaken for mesenteric tumour clinically.

Acknowledgement

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