INTRODUCTION

Heterotopic pancreas (HP) is defined as pancreatic tissue outside the boundaries of the pancreas that lacks anatomic and vascular continuity to this organ. HP is a relatively infrequent lesion, with an incidence ranging from 0.5-13% in autopsy studies, being more common at the age of 30-50 years with a male predominance. Though this is a benign condition, however, serious benign and malignant changes are well documented. Definite diagnosis is very difficult to achieve. To date there are not many cases reported to define the pathological features at endoscopy, endoscopic ultrasound scan with or without fine needle cytology, or CT scanning. It mimics other sub-mucosal pathologies like leiomyoma and Gastro Intestinal Stromal Tumour (GIST). Laparoscopic excision of the lesion is safe and provides a definite diagnosis.

CASE REPORT

A 37-year-old lady presented with few months history of epigastric discomfort, dyspepsia and reflux. There was no history of ingestion of any ulcerogenic substances and no family history of gastric cancer. Upper GI endoscopy showed a 1.5 cm lesion at the distal stomach with central umblication (Figure 1). Biopsy showed features of normal gastric mucosa. CT scan of abdomen did not show any specific abnormality. In view of an uncertain diagnosis in a young patient, a multidisciplinary team decided to excise the lesion. A laparoscopic approach was used with three-ports technique. Patient was placed in supine area under general anaesthetic. A 10 mm peri-umbilical port was used for a zero degree laparoscope. A 5 mm port on the left side of midline and a 12 mm port on the right side of midline were introduced. Exploratory laparoscopy did not show any other abnormality. Lesion was easily identified as an indentation of the anterior wall of distal stomach. Using gastroscope the position of the lesion was confirmed. A wedge excision was performed using an endo-GIA stapler. Excision of the lesion was confirmed with gastroscopy at the same time. Patient made an uneventful recovery. Macroscopically the resection consisted of a wedge shaped piece of stomach tissue with a central dimpled nodule measuring 10 x 8 mm. Microscopically, the specimen contained polypoid gastric antral mucosa. However, in the sub-mucosa there were islands of pancreatic acini and ductules surrounded by bands of smooth muscle fibers. No pancreatic islets were present (Figure 2).

The patient's symptoms persisted, therefore, she underwent further investigations. A significant gastro-

ABSTRACT

Heterotopic pancreas (HP) in stomach is a rare pathological entity that poses clinical dilemma for diagnosis and management. It carries a risk of developing serious benign and malignant complications. This is a case of 37-year-old lady who presented with dyspeptic symptoms and was found to have a 1.5 cm umblicated lesion in the distal stomach on gastroscopy. Endoscopic biopsy showed normal gastric mucosa and CT scan of stomach did not show any specific abnormality. A laparoscopic wedge excision was performed. Histology showed features of heterotopic pancreas. Endoscopic and histological pictures are presented to increase the awareness of this rare entity. Laparoscopic wedge excision's of a localized HP is recommended as a safe procedure to achieve diagnosis and plan for further management.

Key words: Heterotopic pancreas. Stomach neoplasm. Laparoscopic excision. Umbilicated lesions. Gastroscopy.
esophageal reflux was proven on pH study. Her symptoms completely settled after a laparoscopic fundoplication. She remains asymptomatic for 3 years after surgery.

**DISCUSSION**

Heterotopic pancreas is a rare pathologic entity that poses clinical diagnostic dilemma. Clinical presentation is variable. HP is usually found in the upper gastrointestinal tract, with more than 90% of the cases involving the stomach, duodenum, jejunum, and Meckel’s diverticulum.2 Unusual locations are the colon, spleen, liver, biliary tract, mesentry, skin, lymph nodes, and fallopian tube.3

The HP may contain any mixture of tissues normally found in the pancreas. HP can be divided into 4 types: type I, those comprising all cell types (total heterotopia); type II, composed of ducts only (canalicular heterotopia); type III, composed of acinar cells only (exocrine heterotopia); and type IV, composed of islet cells only (endocrine heterotopias).4

It is often an incidental finding and can be found at different sites in the gastrointestinal tract. It may become clinically evident when complicated by pathologic changes such as acute or chronic pancreatitis, abscess and pseudocyst formation, bleeding, obstruction. Adenocarcinoma arising within ectopic pancreas is a rare occurrence.5,6

Barium swallow study may show a typical image of a rounded filling defect with central indentation. The reported sensitivity and specificity are 87.5% and 71.4%, respectively.7 Gastroscopy may show an umbilicated broad based lesion and the mucosal biopsy may show normal gastric mucosa as in our case. This leaves a diagnostic dilemma. The differential diagnosis is Gastro Intestinal Stromal Tumour (GIST). The increasing use of endoscopic ultrasound and fine-needle aspiration for the diagnosis of gastrointestinal tumours make the recognition of pseudoneoplastic lesions at unusual sites an important step in the optimum management of such a patient.8 At present there are not enough literature reports available to provide diagnostic characteristic radiological features on CT scan. Hence this lesion is very difficult to diagnose pre-operatively.

There are only few cases of laparoscopic wedge excision of heterotopic pancreas of stomach been reported.9,10 We suggest that laparoscopic wedge excision of gastric heterotopic mucosa is a safe and a valid option to achieve a definite diagnosis. In this case, excision of this lesion did not provide any symptomatic relief. However, it alleviated the patient's and physician's anxiety, prevented the risk of potential benign and malignant serious complications and clarified the route for the further management of patient's symptoms.

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**REFERENCES**