TRANSENDOSCOPIC REMOVAL OF HETEROTOPIC PANCREATIC TISSUE IN THE STOMACH — A CASE REPORT

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SYNOPSIS

LTC, a 22 year old Chinese male with epigastric pain and an iron deficiency anaemia. Gastroscopy showed a sessile gastric polyp at the antrum. Transendoscopic polypectomy was done. The histopathologist reported aberrant pancreatic tissue within the submucosa of the polyp. Patient has since been symptom free and check gastroscopy and biopsy has shown no residual ectopic pancreatic tissue.

INTRODUCTION

The presence of pancreatic tissue in an aberrant location is no longer considered a rare finding. The reports of Barbosa et al (1), Martinez et al (3), Nelson & Scott (2) and recently Armstrong and Associates (5) have shown that aberrant pancreatic tissue is being increasingly recognised throughout the gastrointestinal tract and that the commonest site where it is found is in the stomach, duodenum and jejunum (70 to 85%, Barbossa, Armstrong).

Because complications viz. pancreatitis, ulceration, islet cell tumour, cysts and non-secreting neoplasm can occur in pancreatic heterotopia, the recommended treatment for this condition has always been complete surgical extirpation once a diagnosis is made. Also once the lesion is removed, the symptomatic cases usually improve. Until today, a laparotomy was usually required whether or not simple excision or more radical surgery was done. This paper is meant to demonstrate that in the case of such lesions (should they present as polypoidal masses) in the stomach, a simple method of transendoscopic removal can avoid a needless laparotomy and the disabling sequelae of major surgery.

CASE REPORT

LTC, a 22 year old Chinese male presented to the Department of Surgery, Changi Hospital with epigastric pain and a diagnosed iron deficiency anaemia of 9.8 gm% on 16 December, 1980. The pain was vague and had no definite clinical pattern. Clinical examination was also essentially normal. Because of persistent symptoms, a gastroscopy was done on 23 Febraury 1981 and this showed a sessile gastric polyp measuring 0.5 cm in diameter at the gastric antrum (Fig. 1). An augmented histamine test was conducted and this was within normal limits. As expected he did not respond to a course of antacid therapy.

A repeat gastroscopy was done on 8 September, 1981. This revealed that the polyp had grown markedly in size and measured 1.5 cm in diameter. A transendoscopic polypectomy was effected and the specimen submitted to histological review. The latter was reported as heterotopic pancreatic tissue within the submucosa of the polpy (Fig. II). Associated gastritis was present.

At routine follow-up the patient was noted to be totally symptom free. Despite this, a check gastroscopy was thought indicated and this was done on 22 October, 1981, and it showed no abnormality grossly. A biopsy of the area where the polypectomy was previously done was obtained. The latter was reported as showing only gastritic changes and there was no evidence of residual ectopic pancreatic tissue.

The patient is still being followed up every six months and he is free from all complaints.

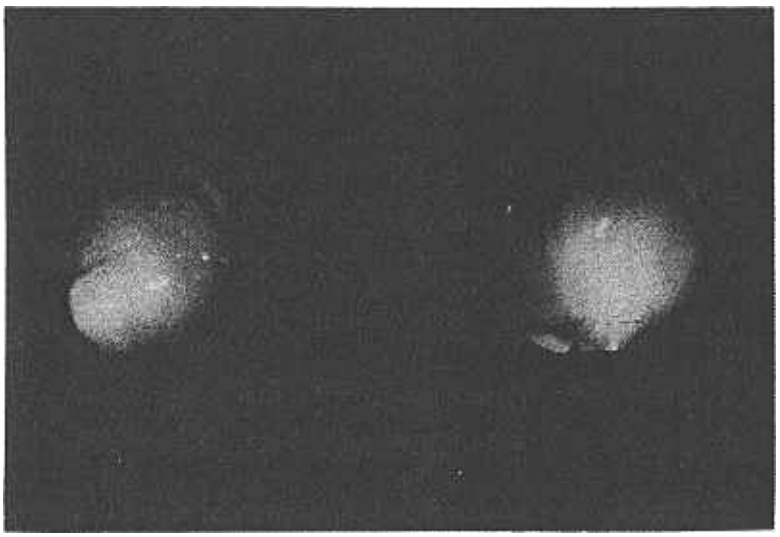

Fig. I: Endoscopic picture of Ectopic pancreatic tissue presenting as a sessile gastric polyp.

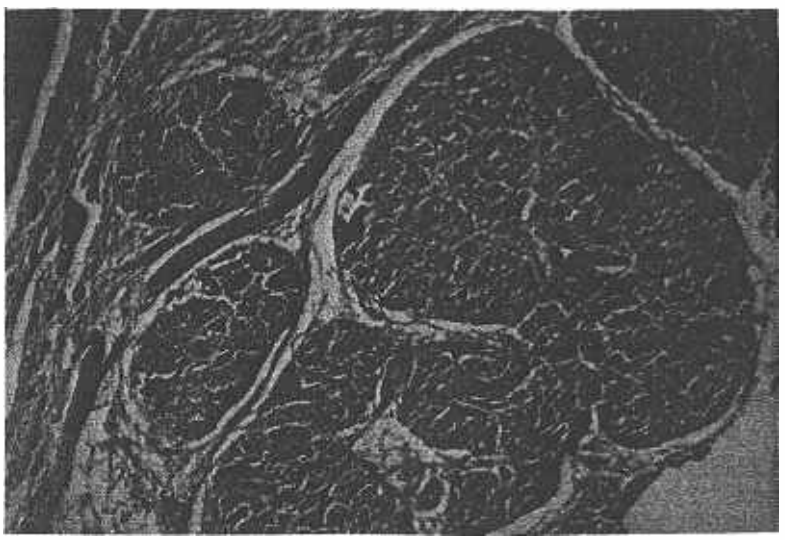

Fig. II: Microscopic slide of Ectopic pancreatic tissue from the "gastric polyp".

DISCUSSION

Pancreatic heterotopia can be found in all age groups but is most commonly encountered in the 4th and 5th decades of life. The incidence is slightly more in the male. The condition does not have a specific symptom complex but Palmer reports that some type of epigastric pain was the presenting symptom in above 75% of his patients and that haemorrhage, loss of appetite and weight were infrequent (4). Recently Armstrong has stated that all gastric lesions are associated with dyspepsia (5). Diagnosis is extremely difficult preoperatively and the majority of such lesions discovered during life are not usually suspected prior to surgery and histological study. However, when properly performed, certain findings of double contrast radiology eg. demonstration of barium filled excretory ducts within the boundaries of a small filling defect (less than 1.5 cm) located in the antrum or a discernible duct orifice at or near the summit of a polypoidal tumour within 5 cm of the pylorus are characteristic. The endoscopic diagnosis is equally difficult, the nodule of heterotopic pancreas being difficult to differentiate from a leiomyoma, an adenomatous or regenerative polyp. In the 156 cases collected by Palmer (4), 73% were submucosal lesions; 17% occurred in the muscularis propria and 10% were subserosal in location. While they may be multiple, the majority are single, one quarter being found in the pylorus with two thirds in the antrum.

Medical management is not justified as the symptomatic cases simply do not respond while the threat of complications supervening remain. Treatment must necessarily be excision of all heterotopic masses of pancreatic tissue involving the stomach. Since 73% of gastric lesions occur as simple polypoidal mucosal elevations, they are ideally suitable for transendoscopic removal with the diathermy snare. For the other types, local excision at laparotomy is the most suitable operation after frozen section has confirmed the diagnosis. More radical forms of surgery with their postoperative sequelae are not justified unless there is additional pathology or complications.

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