LETTER TO EDITOR

A sleeve gastrectomy with pseudo-infiltrative pancreatic heterotopia and fundic gland polyps

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Dear Editor,

Sleeve gastrectomy is performed to reduce stomach size and accelerate gastric transit as a complement to treatment of morbid obesity, however, pathological findings have been reported in the resection specimens in 19.8 to 57.1% of cases, with pancreatic heterotopia (PH) being the rarest of all (0.04 to 0.1%).1-2

We report for the first time a case of sleeve gastrectomy that showed multiple abnormal findings, including PH with a pseudo-infiltrative appearance that elicited a differential diagnosis of malignancy.

A 35-year-old female was admitted for laparoscopic sleeve gastrectomy for morbid obesity. Her medical history was significant for asthma and gastro-oesophageal reflux disease. The endoscopy performed six months prior to the operation revealed hiatal hernia. During the operation, a 2 cm submucosal lesion was noted in the greater curve and a sleeve gastrectomy was performed, as planned.

On gross examination, there was a vague nodular submucosal lesion, measuring 2 x 1.7 x 1.5 cm (Fig. 1A). Cut sections revealed a well-circumscribed, tan-rubbery nodule (Fig. 1B). There were at least five mucosal polyps, ranging from 0.2 to 0.5 cm in greatest dimension (Fig. 1A). Histological examination of the formalin-fixed paraffin-embedded tissues showed specialised gastric mucosa with a submucosal lesion (Figs. 2A and 2B), composed of acinar cells, islets and ductal structures (Figure 2C) consistent with PH. The PH showed a pseudo-infiltrative appearance in the muscularis propria (Fig. 2D) but no dysplasia or malignancy were noted. Histological examination of the polyps revealed cystically dilated glands lined by oxyntic cells, consistent with fundic gland polyps. There was also mild chronic inactive gastritis. The patient recovered uneventfully after the operation.

Pathological findings in sleeve gastrectomy specimens are common and the most frequently reported are gastritis and fundic gland polyps.1,2 A recent systematic review found them in one third of the cases studied.3

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FIG. 1: (A) Sleeve gastrectomy specimen with submucosal lesion (black arrow) and multiple polyps (red arrows); (B) Cut sections of the submucosal lesion showing a well-circumscribed, tan-white appearance.

FIG. 2: (A) Gastric mucosa with a submucosal lesion; (B) Histological examination showing specialised gastric mucosa; (C) Low power view of PH with pseudo-infiltrative appearance; (D) High power view of PH showing no dysplasia or malignancy.
Findings other than PH include gastrointestinal stromal tumour (GIST), leiomyoma, submucosal lipoma, neurofibroma and glomus tumour. PH, defined as the presence of pancreatic tissue outside the pancreas without anatomic and vascular relationship to the pancreas, is most frequently found in the jejunum, duodenum, and stomach. The type of PH is determined based on the presence of exocrine, endocrine and canalicular components of the pancreatic tissue present. Our case represents total PH (Heinrich type 1) as all three components were present. PH is predominantly found in the submucosa and involvement of the muscularis propria may mimic the appearance of an infiltrative malignancy. Furthermore, adenocarcinoma has been previously reported in PH found in the stomach, consequently, these cases have to be studied cautiously to rule out malignancy, as was done in our case.

In conclusion, we report for the first time, the case of a patient with sleeve gastrectomy showing pseudo-infiltrative PH, fundic gland polyps and chronic gastritis. Routine gross and histological examination of sleeve gastrectomy specimens is important as pathological findings are common and malignancy can arise from lesions such as PH.

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REFERENCES