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Gastritis cystica polyposa mimicking gastric malignancy

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Gastritis cystica polyposa (GCP) is a rare condition, characterised by the formation of a large polypoid structure seen in the stomach, most frequently after a partial gastrectomy. It is most frequently seen in the operated stomach on the gastric side of any anastamosis.

In the postoperative stomach, the suggested pathogenesis revolves around chronic inflammation due to either reflux of small bowel content or a reaction to sutures.[1,2] The polyp frequently appears endoscopically and radiographically similar to gastric malignancy. Histologically is characterised by polypoid hyperplasia of gastric mucosa with cystically dilated glandular structures.[1]

We present to our knowledge the first reported case of GCP in Australasia in a patient with an intact stomach.

Case report

This 62-year-old lady with shortness of breath and epigastric pain was referred from her general practitioner. Investigations revealed an iron deficiency anaemia, Hb 106 MCV 69 and positive faecal occult blood screen. She underwent colonoscopy, which was normal, and gastroscopy which revealed a small hiatus hernia, a short segment of Barrett's oesophagus and a large polypoid mass in the antrum of the stomach with superficial ulceration, and multiple satellite lesions (Figure 1). *Helicobacter pylori* urease test was negative.

Initial histology returned as benign ulcerated lesion but in the context of the clinical scenario further tissue was required to exclude a malignancy. This lady was referred for surgical follow-up and staging CT, on the presumption of gastric malignancy. The CT demonstrated the polypoid lesion on the greater curvature of the stomach with no associated lymphadenopathy (Figure 2).

After numerous biopsies the lesion was removed with a snare polypectomy. Histology was confirmed as gastritis cystica polyposa profunda (Figure 3) with incomplete excision and a further polypectomy required for complete clearance. After 12 months of quarterly then two 6-monthly endoscopies, our patient continues on omeprazole 40 mg OD and annual endoscopy as potential for recurrence is unknown.

Figure 1. Endoscopic appearance of gastritis cystical polyposa greater curvature of the stomach (main image) with satellite lesions (inset image)

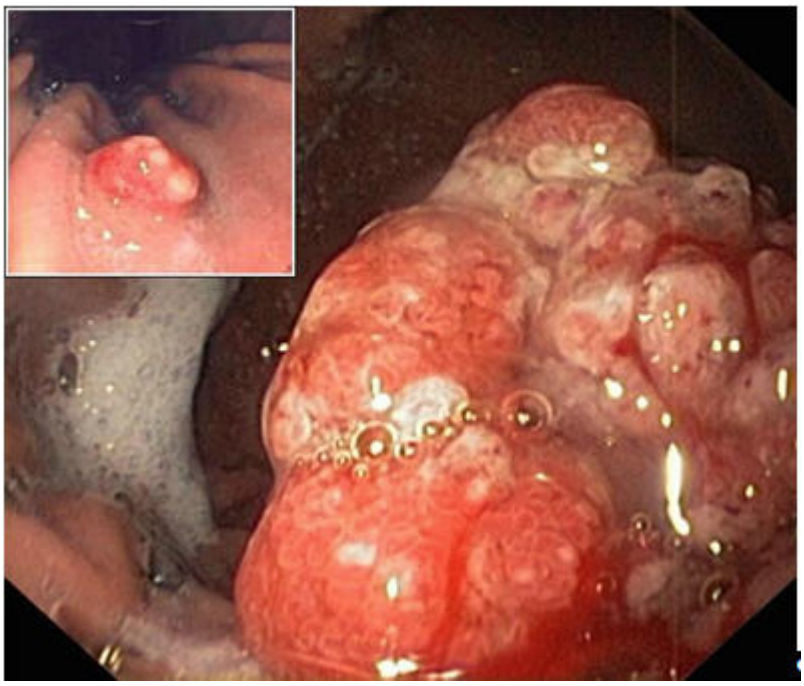


Figure 2. CT image demonstrating polyp attached to greater curvature of the stomach (arrows), reversed prone image

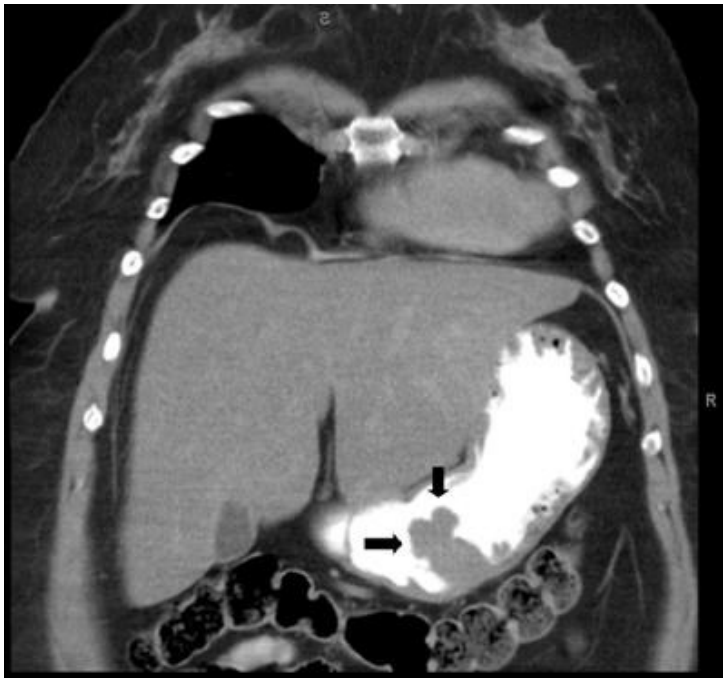
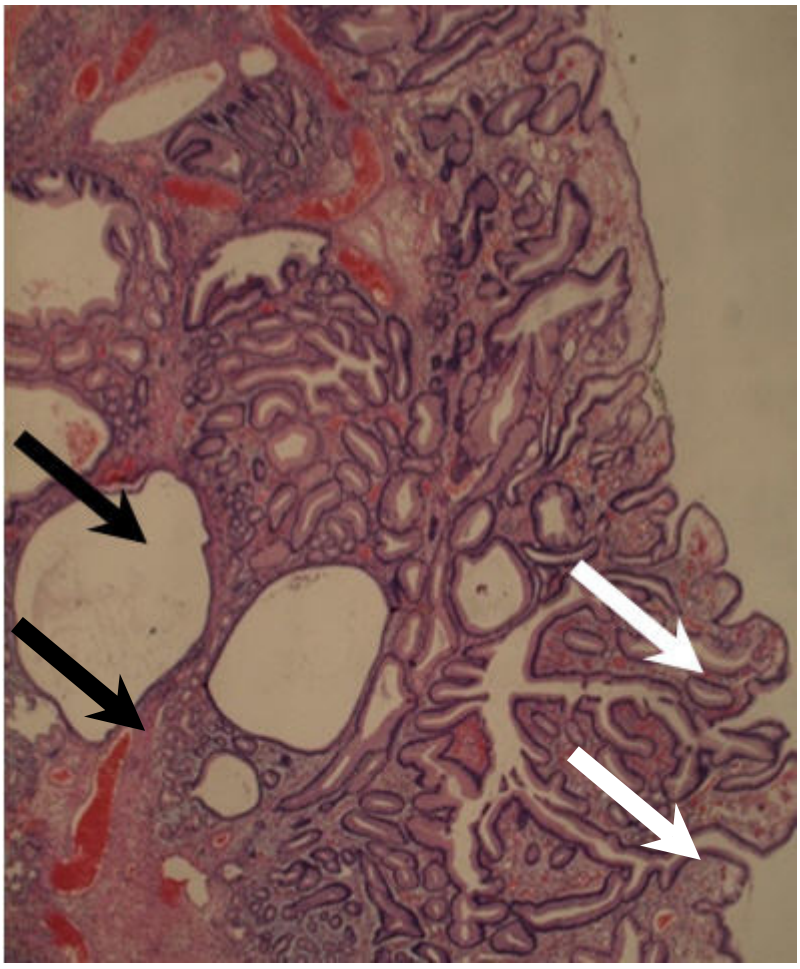


Figure 3. Histological appearance of lesion, demonstrating cystic regions confined to the mucosa and sub-mucosa (arrow) with distorted mucinous glands (white arrow)



Discussion

In the case reported we have demonstrated the difficulty in accurately diagnosing a lesion with appearances endoscopically and radiographically of an early gastric cancer but which is histologically benign. The natural history of this lesion is unclear and a number of gastroscopies were needed to be confident of accurate diagnosis.

GCP remains a rare diagnosis and aside from a few reported cases in intact stomachs,[3–6] seems confined to those with any form of gastro-enterostomy.[2,7] This leads to the suggestion that it is secondary to chronic mucosal irritation from reflux of small bowel content.[1,2,7] Because GCP has been identified alongside early gastric cancer, it has been suggested to be a pre-cancerous lesion, but remains difficult to prove.[4,8]

Histologically GCP is confined to the sub-mucosa, and as such is amenable to endoscopic resection.[4–6] Identifying histological features are of polypoid mucosal

hyperplasia with cystic dilatation of the gastric glands and localised infiltration with inflammatory cells.[1,7]

In this case the initial diagnosis was uncertain and numerous attempts at biopsy were performed before a snare polypectomy was performed to complete excision. With a certain diagnosis of GCP follow up endoscopies have not found evidence of recurrence. There is limited experience of management of GCP lesions and further reporting is necessary to characterise the disease progression. In centres where endoscopic ultrasound and endoscopic sub-mucosal resection are more routinely available this is an attractive lesion to resect and successful resection has been performed up to 20 mm in size.[4]

From a management perspective it would not be surprising to hear of surgical resection being performed for such lesions as endoscopically and radiographically it has features of gastric malignancy.[2,8] In this instance it was detected after investigation for symptomatic iron deficiency anaemia which is associated with gastrointestinal lesions, both benign and malignant.

Further reports are necessary to determine the disease progression to clarify its potential as a pre-malignant lesion as well as to identify causative factors in the un-operated stomach.

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