



GASTRITIS CYSTICA PROFUNDA WITH LYMPHOCYtic GASTRITIS: A CASE REPORT

Surgery

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ABSTRACT

Gastritis Cystica Profunda (GCP) is a relatively rare disease, which is usually observed at anastomotic sites in stomachs of patients that have undergone any gastric procedures. We present the rare case of an elevated lesion arising from posterior wall of stomach in 40-yr old female who had never undergone any gastric surgery. Although the physical examination and laboratory data showed no abnormalities, upper GI endoscopy revealed extensive polypoidal lesions. Patient underwent a partial gastrectomy. A post-operative pathological examination showed gastric mucosal surface and multiple nodules with exophytic masses with foveolar hyperplasia and cystic dilatation of pseudopyloric glands suggestive of GCP with lymphocytic gastritis.

KEYWORDS

Gastritis cystica profunda, Hyperplastic polyp, stomach, lymphocytic gastritis.

INTRODUCTION

GCP is a rare benign disease characterized by polypoid hyperplasia and gastric dilatation of gastric glands which extend into submucosa of the stomach⁽¹⁾ The clinical features may range from upper gastrointestinal symptoms such as abdominal pain, acid reflux, nausea, anorexia and bleeding, to having no symptoms at all.⁽²⁾ It may present as massive GI hemorrhage and gastric outlet obstruction in some cases.⁽³⁻⁵⁾

Currently there is no unified diagnostic standard. The lesion is well known to be related to various factors: first, a procedure that predisposes the patient to mucosal defects such as surgery, biopsy or polypectomy, and second being chronic ischemia and inflammation. In spite of being considered a benign lesion, several studies have shown a correlation between GCP and gastric adenocarcinoma. Menetrier's disease, inverted hyperplastic polyps, GIST are some of the differentials for GCP.

CASE PRESENTATION

A 40 year-old female presented with abdominal pain since one year, and vomiting since one month. Patient gave no history of haematemesis or malaena, or any previous surgeries. Gastroscopy revealed extensive polypoidal lesions in the body and antrum of stomach (Figure 1, 2). A differential diagnosis of leiomyoma or carcinoma stomach was made. Tissue sample was sent for biopsy, which was later reported as lymphocytic gastritis. Colonoscopy reported normal mucosal study. Barium meal examination showed intraluminal filling defects in body, antrum and pylorus of stomach and in second and third parts of duodenum (Figure 3). Physical and laboratory examination revealed no abnormalities. Abdominal CT showed gastric wall being markedly and irregularly thickened, and enhanced scanning showed mild to moderate enhancement around the lesion suggestive of possible gastrointestinal stromal tumour.

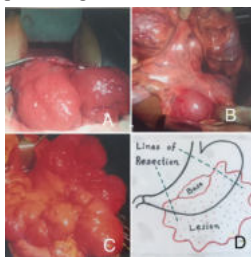


Figure 1:

A—Extensive polypoidal lesions arising from posterior wall of stomach delivered out through gastrotomy.
B—Part of lesion protruding through duodenum upto proximal jejunum seen after lifting up the transverse colon.
C—Lesion in jejunum milked back into stomach.
D—Extent of resection of stomach. 5 cm proximal and distal to lesion. Partial Gastrectomy.

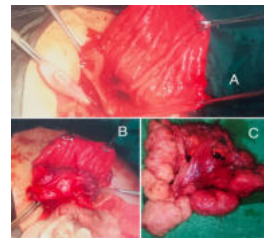


FIGURE 2:

A – Resected ends of stomach antrum and body.
B – Upper part of body remnant closed. Anastomosis between body and antrum (Posterior layer)
C – Specimen



Figure 3: Barium meal examination.

Intraoperatively polypoidal lesions arising from posterior wall of stomach seen, which was delivered through gastrotomy. Size of the lesion was about 15 cm (base)X45 cm (surface). Partial gastrectomy was performed 5 cm proximal and distal to the lesion. Histopathological examination revealed foveolar hyperplasia and cystic dilatation of pseudopyloric glands and their inversion into submucosa through a disrupted muscularis mucosa. These glands are surrounded by smooth muscle bundles and collagen fibres. Findings were suggestive of lymphocytic gastritis. Giemsa staining for H pylori was positive. Postoperative period remained uneventful and patient was followed up for 2 years post-surgery.

DISCUSSION

GCP is a condition characterised by benign cystic downgrowth from gastric glands into submucosa of stomach.⁽⁴⁾ The pathogenesis maybe due to ischemia and chronic inflammation occurring at site of previous gastroenterostomy. Disruption in the integrity of muscularis mucosa causes migration of epithelial contents into submucosa, with subsequent atrophic gastritis. Littler and Gleibermann proposed that mucosal prolapse and following inflammation have a role to play in the development of GCP⁽⁶⁾

Stage 1: Cystic glands are limited to mucosal layer (gastritis cystica superficialis)

Stage 2: With gastric glands spreading into the submucosa (gastritis cystica profunda)

Chronic gastritis accompanied by lymphocytosis and plasmocytosis in the lamina propria has been termed as 'Lymphocytic Gastritis'.

On endoscopy, lymphocytic gastritis tends to produce a complex of abnormal patterns that have been grouped together as 'Varioliform Gastritis'. Usually patient remains asymptomatic. However, one type of giant fold disease or hypertrophic gastropathy is a diffuse form of lymphocytic gastritis associated with hyperplasia and showing clinical features of Menetrier's disease including protein loss in about one-third of the patients as well as nausea, vomiting and abdominal pain. The main treatment of GCP remains surgical removal of lesion, while minimizing bile reflux into stomach.

CONCLUSION

Due to the premalignant nature of the disease, histopathological evaluation is a must. Also, since GCP recurrence after its surgical resection has been reported, a long term follow up is required.

The case reported demonstrates that GCP is not limited to patients who have undergone previous gastric surgeries, and should hence be considered for cases with abnormalities of stomach mucosa.

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