

Gastritis cystica profunda with predominant histiocytic reaction mimicking solid submucosal tumor

Sang Jae Noh¹ , Kyoung Min Kim² , Kyu Yun Jang² 

¹Department of Forensic Medicine, Jeonbuk National University Medical School, Research Institute of Clinical Medicine of Jeonbuk National University-Biomedical Research Institute of Jeonbuk National University Hospital and Research Institute for Endocrine Sciences, Jeonju, Korea

²Department of Pathology, Jeonbuk National University Medical School, Research Institute of Clinical Medicine of Jeonbuk National University-Biomedical Research Institute of Jeonbuk National University Hospital and Research Institute for Endocrine Sciences, Jeonju, Korea

Cite this article as: Noh SJ, Kim KM, Jang KY. Gastritis cystica profunda with predominant histiocytic reaction mimicking solid submucosal tumor. *Turk J Gastroenterol* 2020; 31(10): 726-8.

Dear Editor,

Gastritis cystica profunda (GCP) is a rare gastric lesion presenting as a submucosal or polypoid mass with internal cystic changes. Mucosal injury through chronic inflammation, ischemia, or previous surgery is suggested to be involved in the pathogenesis of the GCP (1). Many patients with GCP complain of abdominal pain, nausea,

anorexia, bleeding, or gastric obstruction; however, some may be asymptomatic (2). If a patient with GCP has a benign clinical course, GCP is possibly a precancerous lesion, and gastric adenocarcinoma frequently coexists with GCP (3). GCP can often masquerade as a malignancy clinically (4). Pathologically, GCP is characterized by cystic dilatation of the invaginated gastric glands into the submucosa or deeper layers; thus, the most common

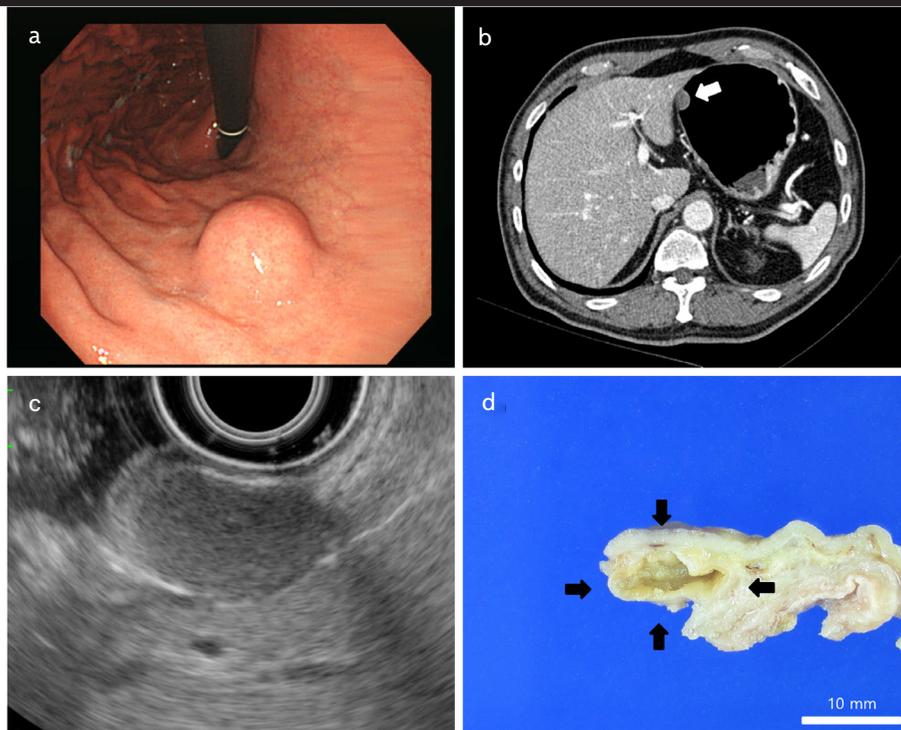


Figure 1. a-d. a) Endoscopy revealing luminal-protruding mass in the anterior body of the stomach. b) Abdominal computed tomography scan of the protruding mass (white arrow) of the gastric wall. c) Endoscopic ultrasonography showing a homogenous solid mass, mimicking a solid submucosal tumor. d) Cut section of the stomach showing a single cystic lesion filled with yellowish debris (black arrows).

Corresponding Author: **Kyu Yun Jang**; kyjang@chonbuk.ac.kr

Received: **June 4, 2019** Accepted: **August 10, 2019**

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DOI: [10.5152/tjg.2020.19444](https://doi.org/10.5152/tjg.2020.19444)

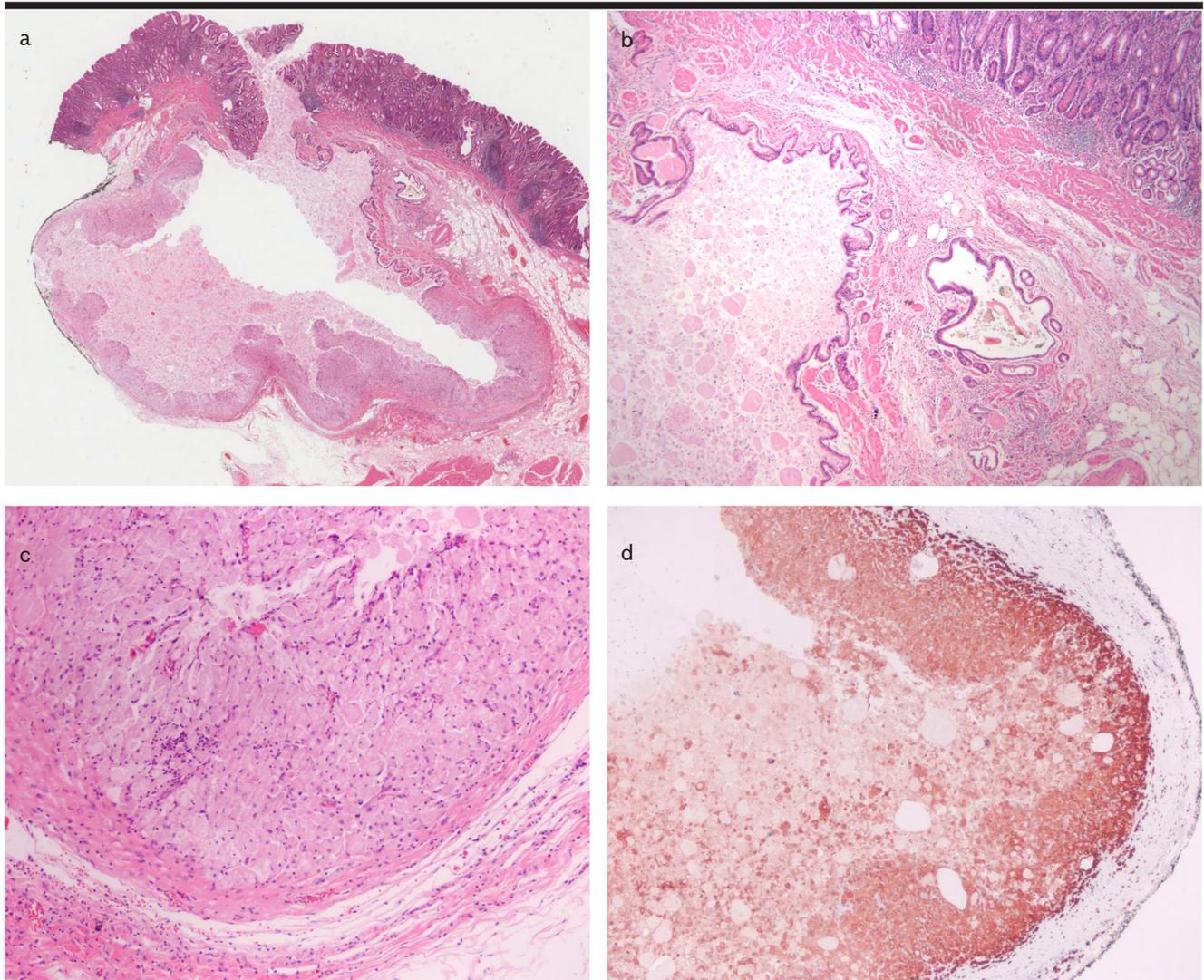


Figure 2. a-d. a) Slide view of the resected gastric submucosal lesion (hematoxylin and eosin [H&E] stain). b) Cystic glands with tall columnar epitheliums seen in the proximal portion of the gastritis cystica profunda (H&E stain, 40 \times). c) Thinned muscularis mucosae and inner histiocyte accumulation on the basal wall of the gastritis cystica profunda (H&E stain, 200 \times). d) Histiocytes positive for CD68 by immunostaining (200 \times).

finding is multiple anechoic or hypoechoic cystic spaces with minimal solid component in the submucosa on endoscopic ultrasonography (EUS) and computed tomography (CT) scan (1, 2, 5-7). Here we present a case of GCP with unusual radiologic and histologic findings.

A 61-year-old man without previous gastric surgery presented with a gastric mass incidentally detected during a general health checkup. The patient did not complain any gastrointestinal symptoms. Endoscopy and an abdominal CT scan revealed a 1.3 cm \times 1.1 cm sized submucosal mass protruding into the lumen in the anterior body of the

stomach (Figure 1a, b). Subsequent EUS scan revealed a well-marginated, homogenous, hypoechoic submucosal mass located in the fourth layer (muscularis propria) of the gastric wall (Figure 1c). Endoscopic and pathologic examination of the surrounding gastric mucosa revealed chronic active gastritis with lymphoid follicles, intestinal metaplasia, and *Helicobacter pylori* infection. Preoperative diagnosis was gastric submucosal tumor, likely gastrointestinal stromal tumor. Laparoscopic wedge resection was performed, and the postoperative course was uneventful without evidence of recurrence. The submucosal lesion was noted to be a single cystic mass. The cys-

tic cavity was filled by soft yellowish debris and extended into the submucosa (Figure 1d). The overlying gastric mucosa was eroded, and the cystic cavity communicated with the gastric lumen. The central cystic space of the lesion was filled with foamy histiocyte debris (Figure 2a). The columnar epitheliums and small tubular glands were seen in the proximal portion of the cystic lesion (Figure 2b). The basal wall of the cystic lesion was surrounded by aggregates of thick inner histocytes, which were with positive for histiocyte marker CD68 evaluated by immunostaining, and a thinner outer muscularis mucosae (Figures 2c, d). In conclusion, the cystic space of the GCP was closely packed with foamy histiocyte debris and lined by aggregates of histiocytes. Therefore, the GCP mimicked solid submucosal tumors, likely gastrointestinal stromal tumor, lymphoma, or myogenic tumors, in the preoperative radiologic evaluation.

Informed Consent: Informed consent was obtained from the patient who participated in this study.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – S.J.N., K.Y.J.; Design – S.J.N., K.Y.J.; Supervision – K.Y.J.; Resource – S.J.N., K.M.K.; Materials – S.J.N., K.M.K.; Data Collection and/or Processing – S.J.N., K.M.K.; Analysis and/or Interpretation – S.J.N., K.M.K., K.Y.J.; Literature Search – S.J.N., K.M.K.; Writing – S.J.N., K.M.K., K.Y.J.; Critical Reviews – S.J.N., K.Y.J.

Conflict of Interest: The authors have no conflicts of interest to declare.

Financial Disclosure: This work was supported by grants from the Medical Research Center Program(2017R1A5A2015061) through the National Research Foundation (NRF), which is funded by the Korean government (MSIP).

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