Pyloric gland adenoma in the duodenal bulb: case report of a giant laterally spreading tumor treated with endoscopic submucosal dissection

A 55-year-old man underwent gastroduodenoscopy because of epigastric pain. Abdominal computed tomography revealed a uniformly enhanced mass (10×8 mm) within the duodenum, with no enlargement of lymph nodes (> Fig. 1). A laterally spreading tumor, with a diameter of about 60 mm, was detected within the duodenal bulb (> Fig. 2). The lesion involved the pylorus ring and had a positive lifting sign. Considering the difficulty of endoscopic resection of such a giant lesion in the duodenal bulb, surgical resection was proposed, but the patient refused. Therefore, a standard endoscopic submucosal dissection was performed (► Video 1). Grossly, the resected tissue measured 60×50 mm (▶ Fig. 3). The pathological examination revealed pyloric gland adenoma accompanied by some regional high grade intraepithelial neoplasia (Fig. 4). The lateral and vertical margins of the specimen were negative. No complications occurred during the procedure.

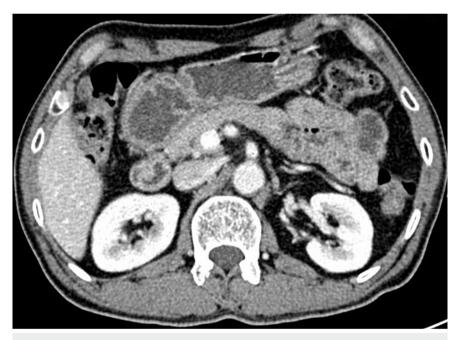
year later showed no significant abnormalities in the duodenal bulb (▶ Fig. 5). Pyloric gland adenoma (PGA) is a rare neoplasm, composed of tightly packed tubules (occasionally cystic dilation) with pyloric gland differentiation, which mainly occurs in the stomach [1]. Since the first description of PGA by Elster in 1976, few PGAs have been documented to originate from the duodenum [2,3] and other extragastric sites; in addition, most reported PGAs have been <25mm [4]. Nowadays, PGA is a recognized precancerous disease, with a reported rate of association with adenocarcinoma ranging from 12% to 47% [5]. The risk of developing adenocarcinoma is associated with its size and the presence of high grade dysplasia [4]. Therefore, endoscopic removal of PGA is indicated. In our report, a rare giant duodenal PGA was described and

A repeat gastroduodenoscopy about 1





▶ Video 1 Endoscopic submucosal dissection of a large laterally spreading pyloric gland adenoma in the duodenal bulb.

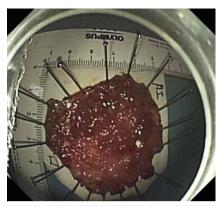


▶ Fig. 1 Abdominal computed tomography revealed a uniformly enhanced mass within the duodenum, without enlargement of lymph nodes.

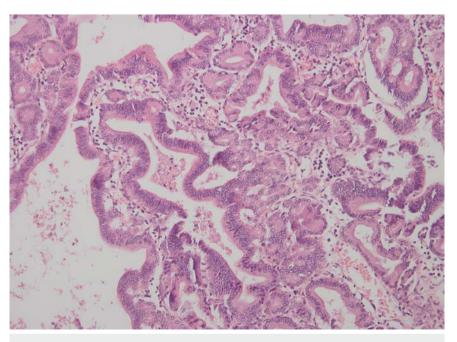
successfully treated with endoscopic Endoscopy_UCTN_Code_CCL_1AB_2AZ_3AB submucosal dissection.



► **Fig. 2** A laterally spreading tumor in the duodenal bulb.



► **Fig.3** The resected tumor was 60×50 mm in diameter.



▶ Fig. 4 Histological examination revealed closely packed pyloric gland-type glands made up of cuboidal to columnar epithelial cells with pale to eosinophilic cytoplasm (hematoxylin and eosin, ×200).



► Fig. 5 Repeat gastroduodenoscopy 1 year later showed no significant abnormalities in the duodenal bulb.

Competing interests

None

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