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 gastro-duodenoscopy 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.

A repeat gastroduodenoscopy about 1 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 <25 mm [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

► **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 submucosal dissection. Endoscopy_UCTN_Code_CCL_1AB_2AZ_3AB

► **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

The authors

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