

A Giant Gastric Pyloric Gland Adenoma Arising in Autoimmune Gastritis

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A 63-year-old woman was referred to our center for a mass detected in screening gastroscopy. The negative test of *Helicobacter pylori* and the positive serum parietal cell antibody was shown. Further evaluation revealed a giant reddish

soft lobulated mass measuring approximately $3 \times 4 \text{ cm}$ adjacent to the cardia (**~ Fig. 1A**) arising in atrophic gastric fundus mucosa consistent with autoimmune gastritis (AIG). The mass consisted of multiple flakes and villous structures



Fig. 1 (A) Gastroscopy revealed a reddish soft lobulated mass measuring approximately 3×4 cm adjacent to the cardia arising in atrophic gastric fundus mucosa consistent with autoimmune gastritis (AIG). (B) Underwater magnifying endoscopy with NBI exhibited abundant microvessels in the villous components, most of which were distributing regularly around the uniform white zone with congestion in the stroma. (C) Bizarrely shaped microvessels in uneven sizes with abrupt change were identified in addition to green thick vessels. (D) High-grade dysplasia was noted in tightly packed pyloriclike glands forming villous architectures in hematoxylin and eosin staining.

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forming a pine-cone-like appearance. Magnifying endoscopy with narrowband imaging (NBI) underwater exhibited abundant microvessels in the villous components (**Fig. 1B**), most of which were distributing regularly around the uniform white zone. However, in certain areas, bizarrely shaped microvessels in uneven size with abrupt change were identified in addition to green thick vessels (**Fig. 1C**), suggesting the presence of high-grade dysplasia (HGD; ► Fig. 1D). The lesion was removed en bloc with endoscopic submucosal dissection (ESD) uneventfully. Histologically, the mass was featured as tightly packed pyloriclike glands forming villous architectures with immunohistochemical co-expression of *MUC6 and MUC5AC*,^{1,2} and the final diagnosis was gastric pyloric gland adenoma (PGA) with HGD. The malignant potential of PGA increases with size, villous architecture, and background of AIG.³ This case may remind us of the importance of magnifying narrowband imaging (NBI) examination in high-risk lesions of PGA. Underwater magnifying is

useful for detailed examination of this kind of giant protrusion close to the cardia.

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