Pyloric gland adenoma is a peculiar tumor which mainly occurs within the stomach. Rarely, the tumor has been documented to originate from the duodenum and from other extragastric sites [1–4].

A 69-year-old woman underwent upper endoscopy for recurrent unspecific epigastric pain and nausea. While the stomach appeared normal on gross inspection, several polypoid lesions, the largest of which measuring 1.5 cm in diameter, were detected within the duodenal bulb (Fig. 1a).

Histopathological examination showed closely packed pyloric gland-type glands made up of cuboidal to columnar epithelial cells that contained pale to eosinophilic cytoplasm. The nuclei were mainly small and round rather than oval, with few cells showing prominent nucleoli (Fig. 1b). Remnants of non-neoplastic heterotopic gastric oxyntic-type glands were found next to the tumor cells. Parts of the lesion demonstrated complex glandular crowding with a back-to-back pattern of tubular structures, increased nuclear pleomorphism and stratification, as well as mitotic activity. These areas qualified as high-grade dysplasia. Immunohistochemistry revealed diffuse positivity of the neoplastic cells for mucin 6 apoprotein (MUC6, Fig. 1c), while expression of MUC5AC was not observed. The high-grade tumor areas showed marked MIB1 proliferative activity (Fig. 1d), leading to a final diagnosis of high-grade pyloric gland adenoma originating from heterotopic gastric mucosa within the duodenal bulb.

The present case illustrates an extragastric pyloric gland adenoma originating from heterotopic gastric mucosa, as has so far been documented in only two other duodenal lesions [1,3] and one rectal lesion [5]. Gastric heterotopia, however, appears to be the prerequisite for tumor histogenesis.

Similar to our case, 10 out of 19 lesions in the study by Chen et al. [3] presented with high-grade dysplasia (n = 8) or associated adenocarcinoma (n = 2). Endoscopists
should recognize that pyloric gland adenomas harbor a considerable risk of malignancy. Tumors should be removed completely, and affected patients warrant close follow-up.

Endoscopy_UCTN_Code_CCL_1AB_2AZ_3AB

Competing interests: None

E. M. Poeschl¹, F. Siebert², M. Vieth³, C. Langner¹
¹ Institute of Pathology, Medical University of Graz, Austria
² Department of Internal Medicine, Hospital of Barmherzige Brüder, Academic Teaching Hospital, St Veit/Glan, Austria
³ Institute of Pathology, Klinikum Bayreuth, Germany

References
1 Kushima R, Rütthlein HJ, Stolte M et al. ‘Pyloric gland-type adenoma’ arising in heterotopic gastric mucosa of the duodenum, with dysplastic progression of the gastric type. Virchows Arch 1999; 435: 452 – 457

Bibliography
Endoscopy 2011; 43: E336 – E337
© Georg Thieme Verlag KG Stuttgart · New York · ISSN 0013-726X

Corresponding author
C. Langner, MD
Institute of Pathology
Medical University of Graz
Auenbruggerplatz 25
A-8036 Graz
Austria
Fax: +43-316-38513432
cord.langner@medunigraz.at