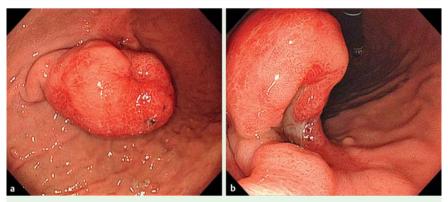
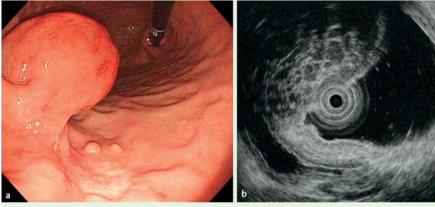
# Large polypoid lymphoid follicles in the stomach causing anemia



**Fig. 1** a Endoscopy revealed a large pedunculated polyp in the greater curvature of the gastric body. b The polyp was partly ulcerated.



**Fig. 2** a The ulceration in the polyp recovered following administration of a proton pump inhibitor. **b** Endoscopic ultrasound showed multiple hypoechoic nodules in the polyp.



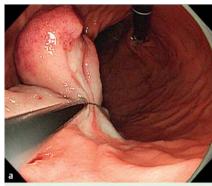
Fig. 3 Abdominal computed tomography showed a pedunculated polyp (arrow) suspended from the gastric wall.

A 73-year-old woman with type C hepatitis underwent esophagogastroduodenoscopy because of asymptomatic anemia (hemoglobin concentration 8.6 g/dL). Endoscopy revealed a large pedunculated polyp in the greater curvature of the gastric body ( Fig. 1 a). The polyp was covered for the most part by normal reddish mucosa and partly by an ulcer ( Fig. 1 b). Biopsy specimens obtained from the polyp and the ulcer showed histopathologically benign tissue. Laboratory tests (serum antibody, fecal antigen, and urea breath test) were negative for Helicobacter pylori. The ulcer healed after administration of a proton pump inhibitor ( Fig. 2a), and the anemia improved after administration of iron (hemoglobin concentration 13.5 g/dL). Endoscopic ultrasound showed multiple hypoechoic nodules in the polyp ( Fig. 2b). Abdominal computed tomography showed a polyp suspended from the gastric wall ( Fig. 3). In the absence of any other bleeding source, the gastric polyp with ulceration was suspected of being the bleeding point and the cause of the anemia. Endoscopic polypectomy was performed without complications (> Fig.4a). The size of the resected specimen was 38×28×20 mm ( Fig. 4b); the cross-section of the formalin-fixed specimen had a multinodular appearance ( Fig. 5). After the polypectomy, and following withdrawal of the iron treatment, the anemia did not return. Histopathological evaluation of the resected specimen demonstrated multiple primary lymphoid follicles in the mucosa and submucosa ( Fig. 6). Immunohistochemical staining showed lymphocytes along with positive staining with CD10 and CD20 and negative staining with CD5, bcl-2, and cyclin-D1. This polypoid lesion was diagnosed as multiple gastric lymphoid follicles.

Reports of lymphoid follicles occurring in *Helicobacter pylori*-negative gastric mucosa are rare [1]. Gencosmanoglu et al. reported that lymphoid follicles were detected in 9 specimens (6%) among 150 gastric polyps obtained by polypectomy [2]. However, to our knowledge, this is the first report of large polypoid lymphoid follicles in a *Helicobacter pylori*-negative stomach, and which were the cause of anemia.

Endoscopy\_UCTN\_Code\_CCL\_1AB\_2AD\_3AB

Competing interests: None





**Fig. 4** a Endoscopic polypectomy was performed with a large snare. **b** The size of the resected specimen was  $38 \times 28 \times 20$  mm.



**Fig. 5** The cross-section of the formalin-fixed resected specimen showed a multinodular appearance.

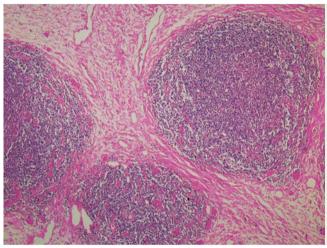


Fig. 6 Microscopy showed multiple primary lymphoid follicles in the mucosa and submucosa (H&E stain).

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#### Reference

- 1 *Carney JA*. Gastric mucosal lymphoid follicles: histology, distribution, frequency, and etiologic features. Am J Surg Pathol 2010; 34: 1019–1024
- 2 Gencosmanoglu R, Sen-Oran E, Kurtkaya-Yapicier O et al. Gastric polypoid lesions: analysis of 150 endoscopic polypectomy specimens from 91 patients. World J Gastroenterol 2003; 9: 2236–2239

## Bibliography

**DOI** http://dx.doi.org/ 10.1055/s-0034-1377217 Endoscopy 2014; 46: E351–E352 © Georg Thieme Verlag KG Stuttgart · New York ISSN 0013-726X

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