


# A Case of Gastric Mucosa-Associated Lymphoid Tissue Lymphoma with Special Endoscopic Morphology

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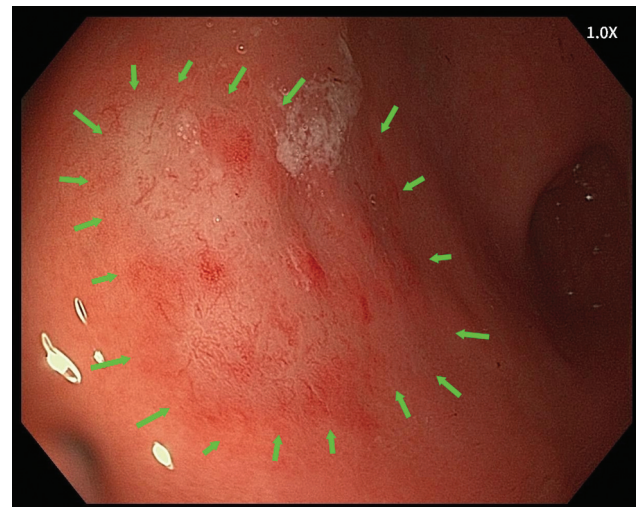
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A 59-year-old man was hospitalized due to a complaint of intermittent upper abdominal distension that persisted over the duration of 2 years. Endoscopy revealed a flat depressed (type 0-IIa+IIc) and whitish lesion approximately 2.0 × 2.5 cm in size in the anterior wall of the antrum (► **Fig. 1**). Reddish spots were sparsely distributed in the mucosa of the lesion. No gastric mucosa atrophy was observed. Magnifying endoscopy with narrow-band imaging (NBI) showed a nice demarcation line between the lesion and the surrounding mucosa. The morphology of the lesion surface was irregular, with minimal residual glandular fossa, as well as damage and loss of the gastric pit structure, suggesting destruction of glands. The microvessels were bifurcated, sparse, and tortuous; “tree like appearance” of the abnormal vessels can be seen in the NBI (► **Fig. 2**). The 20-MHz mini-probe endoscopic ultrasound showed that all layers of the gastric wall were intact without abnormal echo (► **Fig. 3**). Histopathological examination of the biopsy specimen revealed a dense small-to-medium-sized lymphoid infiltration. Immunohistochemistry analysis showed that the infiltrating cells were positive for cluster of differentiation (CD) 20, CD79a, and B cell lymphoma 2, while they were negative for CD3, CD10, and cyclin D1 (► **Fig. 4**). These findings are consistent with a diagnosis of gastric mucosa-associated lymphoid tissue (MALT) lymphoma. The patient's breath test and mucosal tissue biopsy both showed negative results for *Helicobacter pylori*.

Gastric MALT lymphoma is macroscopically classified into three main types as follows: ulcerative (34–69%), mass/polypoid (26–35%), and diffuse infiltrating (15–40%).<sup>1,2</sup> The distinctive feature of the gastric MALT lympho-

ma under the NBI is swelling and destruction of the gastric glandular fossa, along with thickening, extension, and deformation of the microvasculature. However, in this case, as mentioned above, the endoscopic presentation was not entirely consistent. Endoscopic ultrasound revealed that all layers of the gastric wall in this lesion were intact without abnormal echoes, differing significantly from gastric adenocarcinoma, particularly in its advanced stages. However, the whole mucosa of the lesion showed a grayish-white tone compared with the surrounding normal mucosa; some early poor differentiated adenocarcinomas also exhibit similar morphological features.



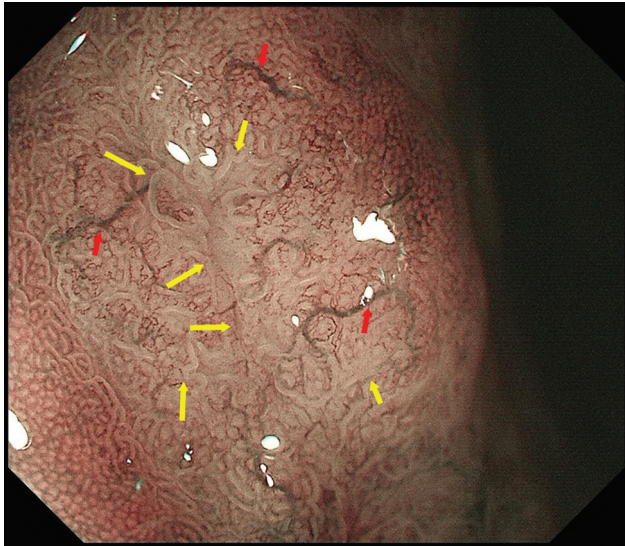
**Fig. 1** Endoscopy revealed a flat depressed and whitish lesion approximately 2.0 × 2.5 cm in size in the anterior wall of the antrum.

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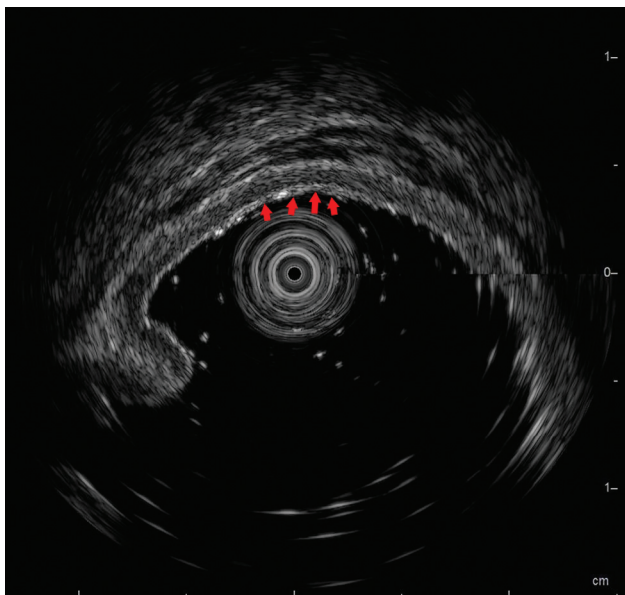
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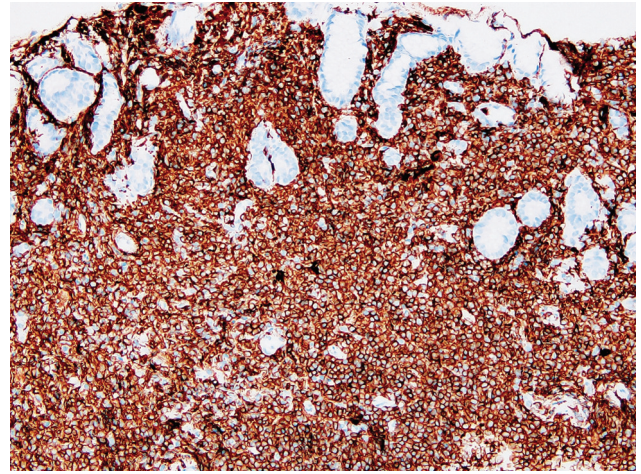
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**Fig. 2** Manifestations of the lesion under magnifying endoscopy and narrow-band imaging endoscopy (Yellow arrow points to the damaged and remaining glands. Red arrow points to the bifurcated, sparse and tortuous, "tree like appearance" abnormal vessels).



**Fig. 3** Endoscopic ultrasound showed that all layers of the gastric wall were intact without abnormal echo (red arrow points to the location of the lesion).



**Fig. 4** Immunohistochemical results of the lesion.

#### Authors' Contributions

All authors contributed to writing of the manuscript.

#### Consent

Patient's written consent was obtained for the publication of the case details.

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#### Conflict of Interest

None declared.

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