Magnified endoscopic images of gastric MALT lymphoma before and after treatment

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Fig. 1 a–d Endoscopic images before and after treatment of gastric mucosa-associated lymphoid tissue (MALT) lymphoma. The upper images are endoscopic images before treatment and the lower images are after treatment. We magnified the greater curvature of the antrum. Conventional endoscopy showed that the ulcerous lesions of gastric MALT lymphoma had changed into a clear atrophic-like mucosa in the 18 months after *Helicobacter pylori* eradication. **a** Conventional endoscopic image before treatment, showing multiple gastric ulcers of the antrum. **b** Magnified endoscopic image before treatment, showing disappearance of the normal gastric pit pattern and microvessels and appearance of irregular, abnormal vessels. **c** Conventional endoscopic image at 18 months after *H. pylori* eradication. **d** Magnified endoscopic image after treatment. The gastric pits and capillary network, which had been destroyed and disappeared (**b**), have recovered.

Recently, the increasing utility of magnifying endoscopy in the diagnosis of gastritis and gastric cancer has been reported [1,2]. However, there have been no reports on magnified endoscopic images of nonepithelial gastric tumors. We conducted a long-term follow-up of gastric mucosa-associated lymphoid tissue (MALT) lymphoma by magnifying endoscopy.

The magnifying electronic video endoscope used was a GIF-Q240Z model (Olympus Optical Co., Ltd., Tokyo, Japan) or EG-490ZW model (Fujinon-Toshiba ES System Co., Tokyo, Japan). The MALT lymphoma lesions were first carefully observed without magnification, and then lesions without erosion were observed at the best magnification. There are various conventional endoscopic images of gastric MALT lymphoma before treatment.

However, under magnifying endoscopy some characteristics are disappearance of the gastric pits and subepithelial capillary network [3] and appearance of abnormal vessels. After recovery from the lymphoma, the lesions are seen as typical atrophic-like mucosa on conventional endoscopic views. Reappearance of the gastric pits and the subepithelial capillary network surrounding the gastric pits are revealed by magnifying endoscopy (● Fig. 1).

Helicobacter pylori eradication therapy has become the first-line therapy for gastric MALT lymphoma [4]. Observation of the surface microstructures and superficial microvessels by magnifying endoscopy is useful for the diagnosis and follow-up of gastric MALT lymphoma.

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