Magnifying endoscopic findings of early duodenal adenocarcinoma in relation to the pathological findings

Primary duodenal carcinoma is a rare entity, with an autopsy incidence reported to range from 0.02% to 0.12% [1–3]. We recently experienced a case of early duodenal adenocarcinoma, which we describe here. We report the magnifying endoscopic findings in relation to the histopathological findings. An 80-year-old man underwent upper endoscopy as part of a routine medical evaluation. This revealed a small elevated lesion in the duodenum opposite the superior duodenal angulus (Fig. 1a). A vascular-rich lesion was found to exist on the duodenal mucosa. Dilated and irregular villous structures were revealed by magnifying endoscopy (Fig. 1b, c). Further magnification revealed the villous structures to have disappeared in the irregular lesion and dilated meandering vessels showing an unequal caliber were observed (Fig. 1d). After submucosal injection of glycerol, the lesion was completely removed by an endoscopic resection without any complications. A histopathological examination revealed well-differentiated adenocarcinoma (5×2 mm) arising from the duodenal mucosa. Fig. 2 compares the findings of magnifying endoscopy with the histological findings. The magnifying endoscopic findings which showed the villous structures to have disappeared with the presence of dilated meandering vessels correlated with cancer (Fig. 2, circle). The part with dilated villous structures was a nontumorous lesion (Fig. 2, box). The magnifying endoscopic findings correlated closely with the histological findings. Magnifying endoscopy may therefore be considered to be potentially useful in the diagnosis of early duodenal cancer.

Y. Onozato1, S. Kakizaki2, H. Ishihara1, N. Sohara1, H. Iizuka1, S. Okamura1, M. Mori2, T. Ogawa3, H. Itoh4
1 Department of Endoscopy and Endoscopic Surgery, Shirakawa Clinic, Maebashi, Gunma, Japan
2 Department of Medicine and Molecular Science, Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan
3 Department of Surgery, Maebashi Red Cross Hospital, Maebashi, Gunma, Japan
4 Department of Pathology, Maebashi Red Cross Hospital, Maebashi, Gunma, Japan

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Corresponding author
S. Kakizaki, MD PhD
Department of Medicine and Molecular Science
Gunma University Graduate School of Medicine
3-39-15 Showa-machi
Maebashi
Gunma 371-8511
Japan
Fax: +81-27-2208136
ekakizaki@showa.gunma-u.ac.jp

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