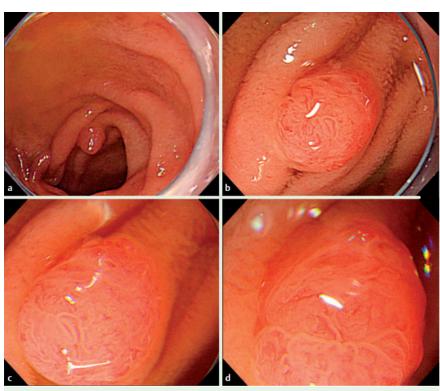
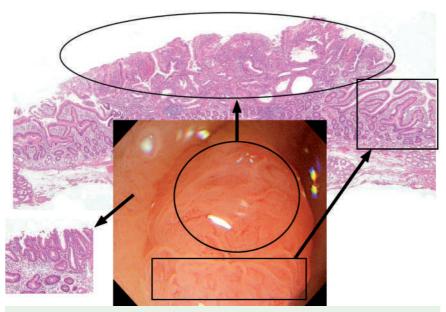
Magnifying endoscopic findings of early duodenal adenocarcinoma in relation to the pathological findings



**Fig. 1** The endoscopic findings of early duodenal adenocarcinoma. **a** Small elevated lesion in the duodenum opposite the superior duodenal angulus. **b, c** Magnifying endoscopy. **d** Further magnification.



**Fig. 2** The magnifying endoscopic findings related to the histopathological 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. 1 a). A vascular-rich lesion was found to exist on the duodenal mucosa. Dilated and irregular villous structures were revealed by magnifying endoscopy ( Fig. 1 b, 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. 1 d). 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.

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## **Bibliography**

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