

Microcarcinoid tumor diagnosed with high-resolution magnification endoscopy and narrow band imaging

A 63-year-old patient presented with persistent dyspepsia. Endoscopy revealed an 8-mm nodule on the anterior wall of the greater curvature in the proximal part of the body of the stomach. Histological analysis demonstrated a well-differentiated tumor showing positive immunostaining with chromogranin with a background mucosa showing features of atrophic gastritis. Gastric pH and fasting serum gastrin levels were elevated. A diagnosis of a type I carcinoid tumor was made. The patient then underwent endoscopic mucosal resection with complete resection of the lesion. Follow-up endoscopy 3 months later showed a scar at the previous resection site. However, a diminutive, flat, reddened lesion measuring less than 3 mm with the appearance of an erosion was detected at a separate site on the posterior wall of the greater curvature (● Fig. 1a). Narrow-band imaging demonstrated that, at the center of the lesion, the pit structure had disappeared (● Fig. 1b). Magnification endoscopy with white light revealed that the subepithelial capillary network was well preserved, but underneath the epithelium, a faint yellowish hue could be seen (● Fig. 1c). These findings were distinctly different from those of a gastric erosion or a minute gastric carcinoma. In an erosion dilated subepithelial capillaries are seen, and in the center of the erosion whitish inflammatory exudates will be visualized [1]. On the other hand, a flat early carcinoma would exhibit proliferation of the subepithelial capillaries, which would be irregular in both caliber and tortuosity [2]. Taking into consideration the patient's previous history, we suspected the lesion could have originated from an endocrine nest/microcarcinoid [3] which had grown just beneath the epithelium. The histopathological analysis of the lesion revealed a minute carcinoid tumor (● Fig. 1d). This case illustrates the differential diagnosis between three lesions which appear very similar: an erosion, a flat early carcinoma, and a minute carcinoid, and shows the utility of high-resolution magnification endos-

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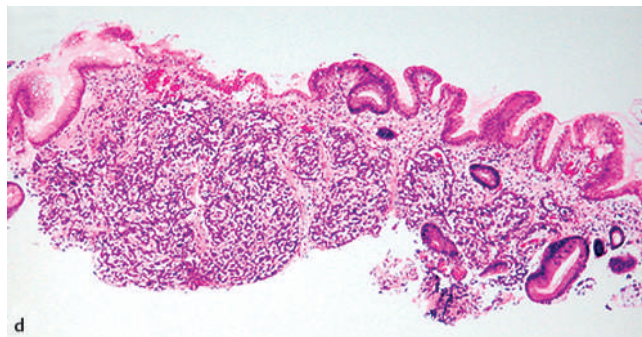
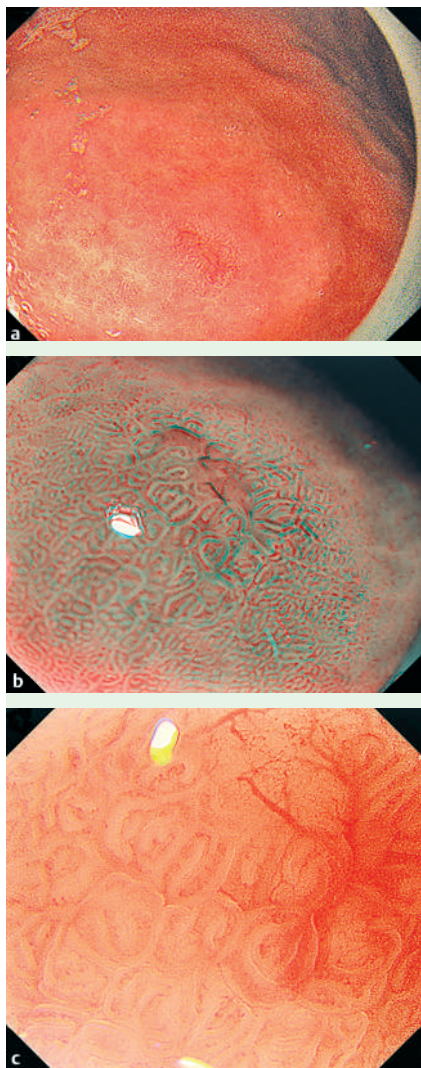


Fig. 1 a A diminutive, flat, reddened lesion measuring less than 3 mm with the appearance of an erosion at the posterior wall of the greater curvature of the stomach. b Narrow-band imaging demonstrated that at the center of the lesion, the pit structure had disappeared. c High-resolution magnification endoscopy revealed that the subepithelial capillary network was well preserved, but underneath the epithelium a faint yellowish hue could be seen. d Endocrine nest/microcarcinoid which had grown just beneath the epithelium.