Endoscopic curative resection of undifferentiated early gastric cancer

High definition endoscopy has improved the diagnosis of early gastric cancer but still has a miss rate of 20%–25%. Magnification endoscopy with narrow-band imaging (NBI) helps to further characterize histology in early gastric cancer [1–3].

A 62-year-old woman attended screening esophagogastroduodenoscopy, and white-light endoscopy showed a slightly depressed lesion of size 10 × 5 mm (Paris type 0-IIc) on the anterior wall of the stomach in the antrum. NBI showed a line of demarcation with absent microsurface pattern and irregular microvascular pattern [4]. Near focus showed a dilated and tortuous corkscrew type of microvascular pattern and intralobular loop type 2 pattern (Fig. 1), as described by Nakayoshi et al., which was suggestive of poorly differentiated adenocarcinoma [1,5]. Biopsies showed a signet cell type of carcinoma.

Intramucosal undifferentiated type adenocarcinoma of size ≤ 2 cm is a candidate for endoscopic resection under expanded criteria in Japanese guidelines 2018. Circumferential marking was done using a noninsulation-tipped endoscopic submucosal dissection knife under Forced Coag mode (Video 1). Submucosal injection using a 25-gauge needle with indigo carmine was performed to lift the lesion (Fig. 2a). An initial mucosal incision was performed on the proximal side of the lesion with the same knife and incision was completed using Endocut I (Fig. 2b). Bleeding was controlled using Coagrasper. Dissection was completed using the ITknife2 (Olympus Corp., Tokyo, Japan) (Fig. 2c).

The resected specimen measured 40 × 25 × 2 mm and revealed a signet ring cell carcinoma, with the deepest invasion...
confined to the mucosa and negative margins (▶ Fig. 3). Follow-up esophagogastroduodenoscopy after 1 year showed resolution of the lesion with no recurrence.

Magnification endoscopy with NBI is a useful modality that helps to characterize and manage early gastric carcinoma, and in our case prevented gastrectomy.

Competing interests

The authors declare that they have no conflict of interest.

References


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▶ Fig. 3 Histological analysis. a Periodic acid–Schiff-Alcian blue staining showed a poorly differentiated adenocarcinoma, with muscularis mucosae free from tumor invasion. b Signet ring cells infiltrated the lamina propria. c, d Specimen showed tumor-free vertical and horizontal margins (respectively 1.6 and 5.7 mm; Type 0 IIc, pT1a ULO, Ly0 V0, pHM0, pVMO).