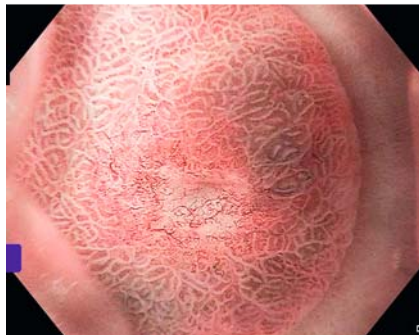


Endoscopic curative resection of undifferentiated early gastric cancer

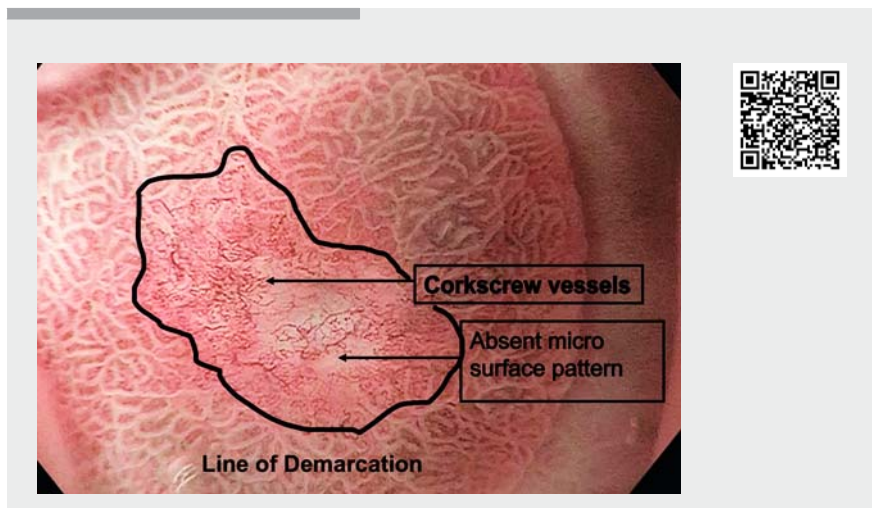
High definition endoscopy has improved the diagnosis of early gastric cancer but still has a miss rate of 20%–25%. Magnification endoscopy with narrow-band imaging (NBI) helps to further characterize histology in early gastric cancer [1–3]. A 62-year-old woman attended screening esophagogastroduodenoscopy, 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 in-

jection 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



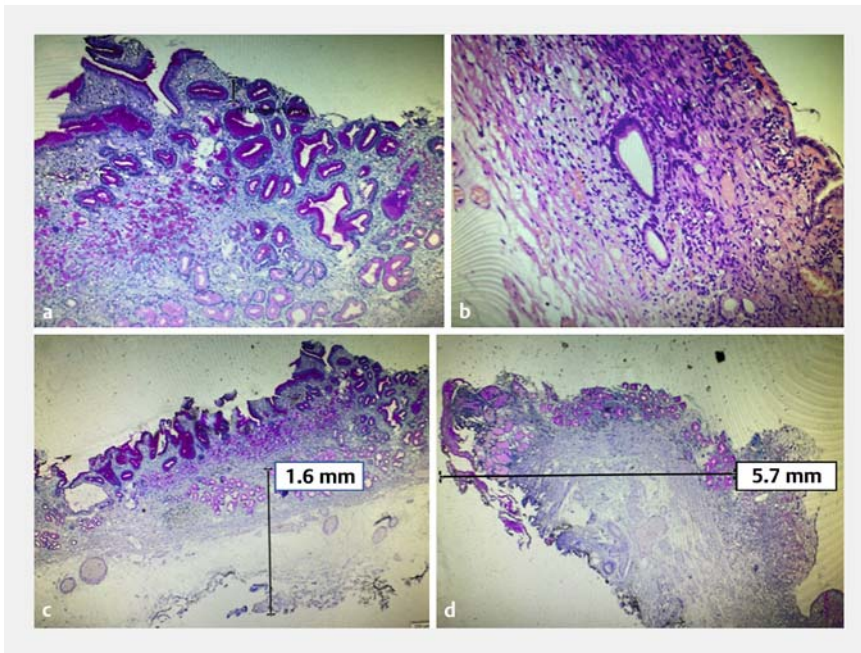
► **Fig. 1** Magnification narrow-band imaging. Line of demarcation, irregular/absent microsurface pattern, and corkscrew microvascular pattern.



► **Video 1** Endoscopic curative resection of undifferentiated early gastric cancer.



► **Fig. 2** Resection of the lesion. **a** Submucosal lift using indigo carmine mixed with (0.9%) normal saline solution. **b** Submucosal dissection using the Dualknife 'J' (Olympus Corp. Tokyo, Japan). **c** Dissection was completed using the ITknife2 (Olympus Corp.).



► **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 I/c, pT1a ULO, Ly0 V0, pHM0, pVMO).

confined to the mucosa and negative margins (► **Fig. 3**). Follow-up esophago-gastroduodenoscopy 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.

Endoscopy_UCTN_Code_CCL_1AB_2AD_3AB

Competing interests

The authors declare that they have no conflict of interest.

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References

- [1] Yokoyama A, Inoue H, Minami H et al. Novel narrow-band imaging magnifying endoscopic classification for early gastric cancer. *Dig Liver Dis* 2010; 42: 704–708
- [2] Yu H, Yang AM, Lu XH et al. Magnifying narrow-band imaging endoscopy is superior in diagnosis of early gastric cancer. *World J Gastroenterol* 2015; 21: 9156
- [3] Kaise M. Advanced endoscopic imaging for early gastric cancer. *Best Pract Res Clin Gastroenterol* 2015; 29: 575–587
- [4] Muto M, Yao K, Kaise M et al. Magnifying endoscopy simple diagnostic algorithm for early gastric cancer (MESDA-G). *Dig Endosc* 2016; 28: 379–393
- [5] Nakayoshi T, Tajiri H, Matsuda K et al. Magnifying endoscopy combined with narrow band imaging system for early gastric cancer: correlation of vascular pattern with histopathology (including video). *Endoscopy* 2004; 36: 1080–1084

Bibliography

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