Flat gastric epithelial neoplasm detected by endoscopic screening with autofluorescence imaging video endoscopy

Autofluorescence imaging (AFI) video endoscopy provides real-time color images from the computerization of captured fluorescence emitted from natural endogenous fluorophores that have been excited by light of specific wavelength. With early gastric cancers, AFI can visualize flat tumors, or the extent of isochromatic lesions and magnifying NBI, it was removed by endoscopic submucosal dissection. Histological examination of the resected specimen showed that it was well-differentiated tubular adenocarcinoma confined to the mucosa and with clear margins (Video 1).

References

Bibliography
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Fig. 1 Autofluorescence imaging (AFI) showed a blurred purple area in a patient with a history of endoscopic submucosal resection for early gastric cancer.

Fig. 2 In the white-light image, neither the extent nor even the presence of the lesion was indicated.

Fig. 3 Magnifying narrow-band imaging (NBI) showed the fine-network microvascular pattern in the center of the tumor.

Video 1
Autofluorescence imaging (AFI) found blurred purple areas in the prepylorus, whereas the lesion was not apparent in white-light images. Magnifying narrow-band imaging (NBI) then revealed a fine-network vascular pattern that indicated well-differentiated adenocarcinoma.

Fig. 4 Histological mapping of the resected specimen: the intramucosal neoplasm (yellow lines) had been removed en bloc.

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