

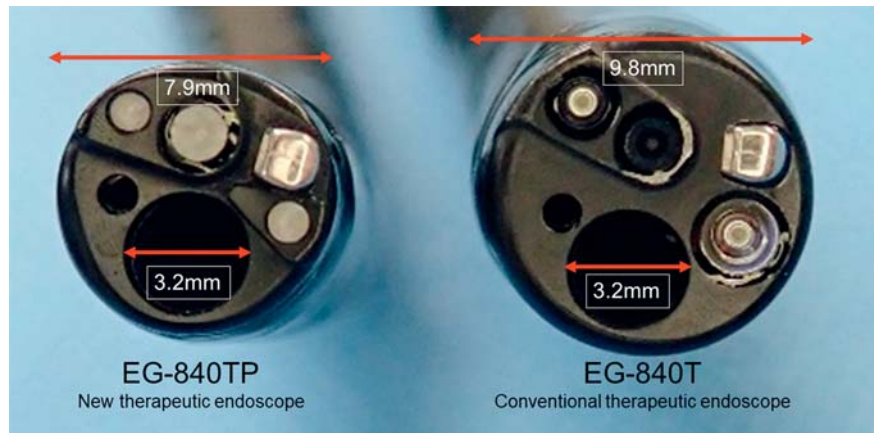
Endoscopic submucosal dissection of gastric neoplasms with severe fibrosis using a new thin-therapeutic endoscope and a dedicated conical cap

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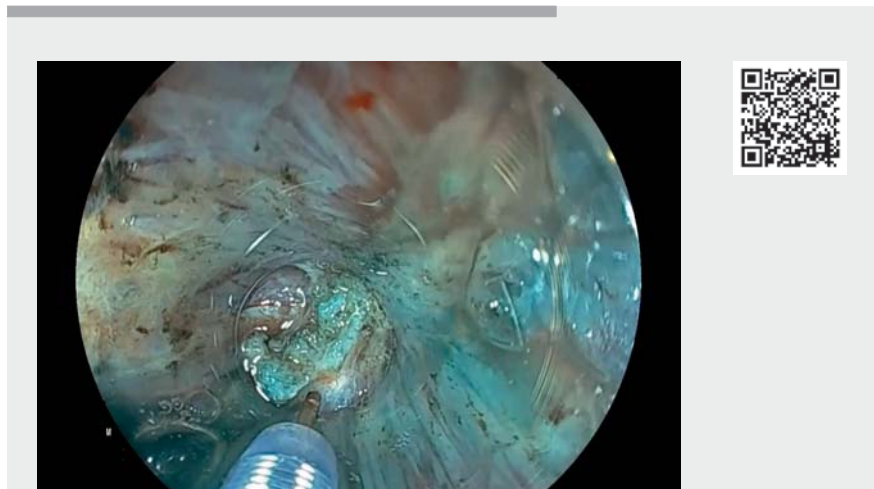
Recently, endoscopic submucosal dissection (ESD) using the pocket-creation method (PCM) has been developed as a kind of third space endoscopy. PCM enables complete dissection under the lesion before making the circumferential incision [1]. Using this method, a wide submucosal space should be created with a small entrance where a small-diameter endoscope is more desirable. A few endoscopists reported ESD using ultrathin endoscopy, but disadvantages for such a procedure have been discussed. Although the accessory channels of existing ultrathin endoscopes (EG-L580NW7, Fujifilm Co., Tokyo, Japan) have a diameter of 2.4 mm, some ESD devices such as the knife and coagulation forceps cannot be inserted through the channel because of their larger diameter [2].

The EG-840TP (Fujifilm Co.) was newly developed for endoscopic treatment as a relatively thin endoscope that has an outer diameter of only 7.9 mm but an accessory channel diameter as large as 3.2 mm (► Fig. 1). It also has a down angle function up to 160 degrees. A calibrated, small-caliber-tip, transparent hood (CAST hood; TOP, Tokyo, Japan) was designed to perform balloon dilation of small intestinal strictures [3]. It is transparent with a 4-mm tip diameter that can be used in ESD. PCM combined with this hood may be more effective in cases with gastric neoplasms accompanied by fibrosis [4].

We present a patient with gastric cancer with fold convergence that recurred after ESD, located in the posterior wall of the middle gastric body. ESD was performed using the PCM with the EG-840TP and a dedicated conical cap (prototype CAST hood), resulting in successful complete resection. Such a therapeutic approach is expected not only to allow precise dissection of severely fibrotic tissue but also



► **Fig. 1** The EG-840TP manufactured by Fujifilm Corporation was recently developed for endoscopic treatment as a thin endoscope that has an outer diameter of only 7.9 mm compared to 9.8 mm of a conventional therapeutic endoscope (EG-840 T); it maintains an accessory channel diameter of 3.2 mm.



► **Video 1** The procedure for the pocket-creation method with an EG-840TP and a dedicated conical cap for early gastric cancer.

to improve endoscopic maneuverability even in a narrow submucosal pocket with severe fibrosis (► **Video 1**). This endoscope may be used for third space endoscopy especially in a narrow space.

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Competing interests

Author HY has patents for ESD devices and double-balloon endoscopy produced by Fujifilm Corporation. Author HY and HO have a consultant relationship with the Fujifilm Corporation and has received honoraria, grants,

and royalties from the company. Author YM and YH have received honoraria from Fujifilm Corporation. HY and YH have a patent for the calibrated, small-caliber-tip, transparent (CAST) hood produced by the Top Corporation. Other authors have no financial conflicts of interest. The funding source had no role in this study.

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