Successful resection of a 16-cm half-circumferential lesion at the greater curvature of the stomach using the endoscopic submucosal large-tunnel method

Gastric endoscopic submucosal dissection (ESD) has become widespread since the development of endodevices and assistance methods. However, as the size of tumors being treated increases, one traction device alone is often not sufficient to apply countertraction. Lesions in the greater curvature are particularly challenging owing to their high risk of bleeding and perforation, and the tendency to accumulate fluid and blood. We report a case of ESD for a giant lesion using the submucosal large-tunnel method.

A 74-year-old man was diagnosed with a 16-cm large gastric carcinoma occupying half of the circumference at the mid-to-upper body of the greater curvature of the stomach (Fig. 1a). Magnified endoscopic examination provided no clear evidence of a submucosal invasive carcinoma, therefore ESD was performed (Video 1). A large tunnel was created and extended with the endoscope in the retroflexed direction (Fig. 1b). The end point of the tunnel was made in the fornix area using a multibending endoscope. After a peripheral incision had been made on the gravitational side, the entire circumferential incision was completed. By leaving a submucosal area at the oral side until the end of the procedure, the natural traction from the anal side continued to work throughout the ESD (Fig. 1c). Careful consideration of the order of resection allowed the tumor to be resected using one tunnel, without the use of other assistance methods (Fig. 1d). There were no adverse events. Histopathology indicated an intramucosal adenocarcinoma, 152 × 115 mm in size, with negative resection margins and no lymphovascular invasion (Fig. 2).

In terms of curative resection, there are few reports of ESD for giant lesions of >15 cm. Various methods, such as traction, tunneling, or a combination method, have been devised but all are sometimes complicated [1–3]. By considering the order in which such lesions are resected, this large-tunnel method can be used to obtain reliable en bloc resection of giant lesions.

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Competing interests

The authors declare that they have no conflict of interest.

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