Resection of a giant gastric mass using an ultrasonic scalpel with endoscopic assistance

A 55-year-old woman presented with melena of 4 days' duration. Upper endoscopy showed a giant pedunculated mass, about 6 cm in size, in the gastric cardia, with hyperemia and erosion (► **Fig. 1**). Histopathology of biopsies found no evidence of malignancy, and endoscopic ultrasonography showed a low-echoic mass with nonhomogeneous echo (► **Fig. 2**). Considering the high risk of bleeding associated with endoscopic resection of such a thick stalk of the mass, and because the patient refused recommended surgical resection, we planned to resect the mass by using an ultrasonic scalpel through a gastric fistula formed by percutaneous endoscopic gastrostomy (PEG).

First, we performed the PEG procedure. Endoscopic treatment was performed 2 weeks later, when the gastric fistula was formed. The patient was under general anesthesia. We introduced a conventional upper endoscope and removed the gastrostomy tube using a grasping forceps. Next we inserted a 5-mm trocar through the gastric fistula and inserted an ultrasonic scalpel (Harmonic ACE; Ethicon Endo-Surgery, Inc., Cincinnati, Ohio, USA) into the stomach through the trocar. Under endoscopic view, we easily resected the mass using the ultrasonic scalpel, with no adverse events (► **Fig. 3**; ► **Video 1**). Finally, we successfully removed the giant mass after using a snare to cut it into small pieces (► **Fig. 4**). The abdominal wound was covered by sterile gauze.

Postoperative pathology was interpreted as a hamartoma with low grade dysplasia. On 1-month follow-up, upper endoscopy showed a white scar in the gastric cardia (► **Fig. 5**) and abdominal wound healing; no delayed complications were recorded.

We present here a special case in which a surgical device was used for resecting a giant mass in the gastric cardia with endoscopic assistance. This method was

► **Fig. 1** Preoperative upper endoscopy showed a giant pedunculated mass, about 6 cm in size, in the gastric cardia, with hyperemia and

► **Fig. 2** Endoscopic ultrasonography showed a low-echoic mass with nonhomogeneous echo.

► **Fig. 4** The giant mass was successfully removed by using a snare to cut it into small pieces.

► **Fig. 3** Under endoscopic view, the mass was easily resected using the ultrasonic scalpel.

► **Fig. 5** Postoperative upper endoscopy showed a white scar in the gastric cardia.

Video 1 Use of an ultrasonic scalpel with endoscopic assistance to resect a giant gastric mass in a 55-year-old woman.

Bibliography

DOI <https://doi.org/10.1055/a-0624-9277>

Published online: 12.6.2018

Endoscopy 2018; 50: E227–E228

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Stuttgart · New York

ISSN 0013-726X

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relatively safe and may be an option for the treatment of certain lesions that are difficult to access using endoscopy alone and need the assistance of surgical devices.

Endoscopy_UCTN_Code_TTT_1AT_2AD

Acknowledgment

We want to thank National Key R&D Program of China, 2017YFC0112305 for their support.

Competing interests

None

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