Nonexposed endoscopic wall inversion surgery with sentinel node mapping for a high risk gastric lesion





Video 1 Nonexposed endoscopic wall inversion surgery in an elderly patient with a suspected T2 gastric cancer.

Endoscopic submucosal dissection (ESD) is the standard approach for the management of early gastric cancer (EGC) [1]. However, in some situations, such as in borderline lesions, a combined laparoscopic-endoscopic technique may be a valid option [2]. We report the case of an 85-year-old man with multiple comorbidities who presented to us for further management of an EGC in the gastric body.

Endoscopic and endosonographic assessment revealed an ulcerated lesion (Paris IIc) with a suspicion of at least deep submucosal invasion (T1b/T2 N0). Owing to his age and comorbidities, the patient refused a gastrectomy but agreed to an individualized approach. After multidisciplinary team discussion, we opted for nonexposed endoscopic wall inversion surgery (NEWS) with sentinel node mapping (**> Video 1**).

NEWS is a subcategory of laparoscopicendoscopic combined surgery [2] whereby the laparoscopic surgeon performs an initial seromuscular incision around the lesion, inverts the entire lesion along with a spacer intraluminally, and then places a seromuscular suture. Finally, the endoscopist performs a full-thickness resection of the lesion, while taking care to spare the seromuscular suture placed by the laparoscopist [3]. This nonexposed approach prevents possible peritoneal spillage and at the same time allows for full-thickness resection.

Compared with laparoscopic wedge resection, NEWS enables minimal tissue resection, especially in difficult positions [4]. Early data on NEWS and sentinel node mapping have demonstrated their safety and efficacy [4, 5]. Histopathology in our patient showed a moderately differentiated cancer (G2) with deep submucosal invasion of 600 µm. Three lymph nodes resected by sentinel node mapping were negative.

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Conflict of Interest

The authors declare that they have no conflict of interest.

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