

## Fully “Dual Knife J®” submucosal tunnel endoscopic resection (STER): a step up to bariatric surgery

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Submucosal tunnel endoscopic resection (STER) is a standardized technique for the enucleation of small submucosal midgut tumors [1,2]. For lesions smaller than 2 cm, the suggested management is long-term surveillance [2]. However, *en bloc* ablation is a possibility in order to obtain definite histology and avoid lifelong follow up [2]. Furthermore, in bariatric surgery, the detection and resection of such lesions found on preoperative screening is crucial because of the altered postoperative anatomy [3]. We report a 52-year-old woman, enrolled in our bariatric program (body mass index: 45.2 kg/m<sup>2</sup>), with a 2 cm submucosal pre-pyloric gastric lesion. A multidisciplinary consultation decided on endoscopic ablation before bariatric surgery. A submucosal injection of indigo carmine-saline mixture and epinephrine was made 5 cm above the lesion; mucosal incision and submucosal tunnel were performed with the Dual Knife J® (Olympus®, Tokyo, Japan) until beyond the lesion. The lesion was enucleated using the same knife (Fig. 1) and complete resection was achieved (Fig. 2). The mucosal incision was closed and made watertight with several endoscopic clips. Operative time was 50 min. Bleeding was null. Oral diet was introduced on the same day. The patient was discharged the next day. Obesity surgery was scheduled three months later. Histological analysis revealed a fully removed 2×1 cm lipoma. For each step of STER procedure, different devices are recommended [1,3]. This is the first report of STER using only one knife allowing injection and section, leading to important cost reduction. STER is of great interest for full removal of potentially suspicious submucosal gastric lesions as a step up for bariatric surgery.

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**Figure 1** Submucosal tunnel creation, and complete enucleation and removal of the subepithelial lesion with section of peduncle and coagulation of the large vessels using the Dual Knife J® in Endocut and Forced coagulation setting



**Figure 2** The 2×1 cm fully removed submucosal tumour with a section of the peduncle

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