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DOI: 10.17235/reed.2020.6297/2019
Link: PubMed (Epub ahead of print)

Please cite this article as:
Tan Linna, Tan Yuyong, Wang Haihua , Liu Deliang . Single tunnel-assisted endoscopic submucosal dissection for a 13-cm giant colorectal laterally spreading tumor. Rev Esp Enferm Dig 2020. doi: 10.17235/reed.2020.6297/2019.

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IPD 6297

Single tunnel-assisted endoscopic submucosal dissection for a 13-cm giant colorectal laterally spreading tumor

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Keywords: Giant laterally spreading tumor. Tunnel-assisted endoscopic resection. Colorectal neoplasm.

Dear Editor,

A 60-year-old male suffering from modest diarrhea for two months was referred to our department. Colonoscopy revealed a giant laterally spreading tumor (LST) at the recto-sigmoid junction (Fig. 1). Considering the size of the neoplasm, a single tunnel-assisted endoscopic submucosal dissection (ESD) strategy was used (Fig. 2). After making a circumferential incision around the neoplasm, a submucosal tunnel was constructed along the longitude axis (Fig. 3). The procedure was performed using a methylene blue, adrenaline and saline mixed solution injection and an alternate dual knife incision. After tunnel completion, the lateral edges were then dissected in sequence as shown in figure 2. The tumor measured 13 × 6.5 × 1 cm and was taken out from the lumen with the help of an endoloop after total dissection. Pathology showed villous tubular adenoma with moderate-high grade dysplasia. The whole procedure took 236 minutes. Follow-up colonoscopy after two months showed ulcer residue and a V_N pit pattern.

A giant laterally spreading tumor is deemed as LSTs > 10 cm. Endoscopic submucosal dissection (ESD) has shown a high en bloc resection rate and curative resection rate for treating LSTs of a moderate size (1). When treating giant LSTs, ESD cause a

significantly higher rate of adverse events such as perforation or bleeding (2). An endoscopic tunneling strategy is the most common treatment for achalasia and has recently shown a good performance in colorectal LST resection (3). Here we describe a case of single tunnel-assisted endoscopic submucosal dissection for a giant colorectal laterally spreading tumor, with no perforation or post-operative bleeding and a comparatively low procedure time (2).

References

1. Saito Y, Uraoka T, Matsuda T, et al. Endoscopic treatment of large superficial colorectal tumors: a case series of 200 endoscopic submucosal dissections (with video). Gastrointest Endosc 2007;66(5):966-73. DOI: 10.1016/j.gie.2007.02.053

2. Jung D H, Youn Y H, Kim J H, et al. Endoscopic submucosal dissection for colorectal lateral spreading tumors larger than 10 cm: is it feasible? Gastrointest Endosc 2015;81(3). DOI: 10.1016/j.gie.2014.09.001

3. Bassioukas S P, Katzakis C, Kitsios C, et al. Endoscopic submucosal dissection with double-tunnel technique for en bloc resection of large rectal laterally spreading tumor. Ann Gastroenterol 2017;30(6):698. DOI: 10.20524/aog.2017.0179

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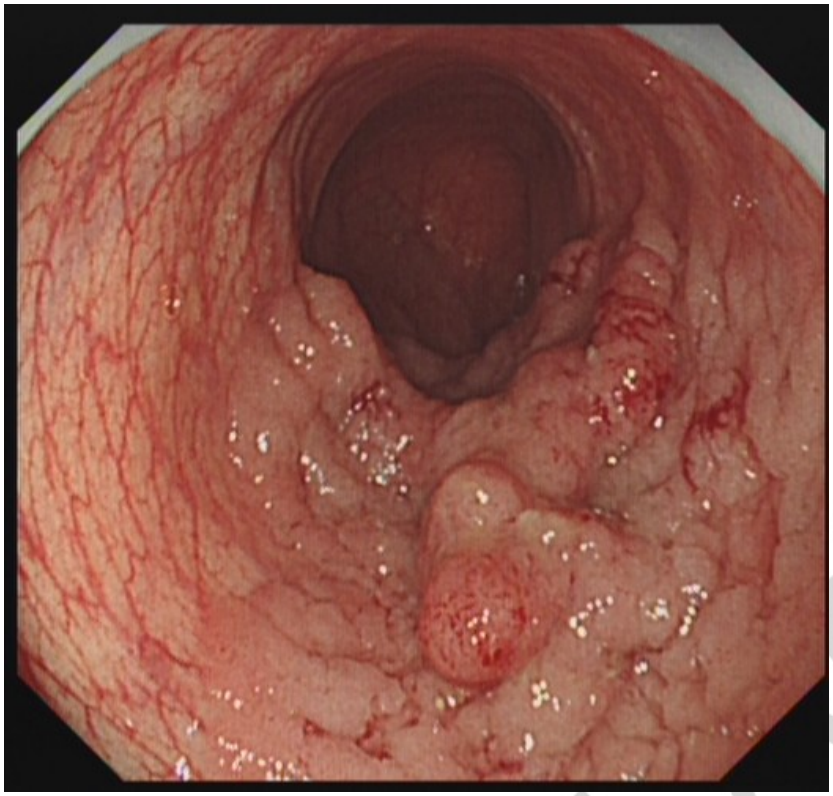

Fig. 1. Colonoscopy showed a giant laterally spreading tumor at the recto-sigmoid junction.

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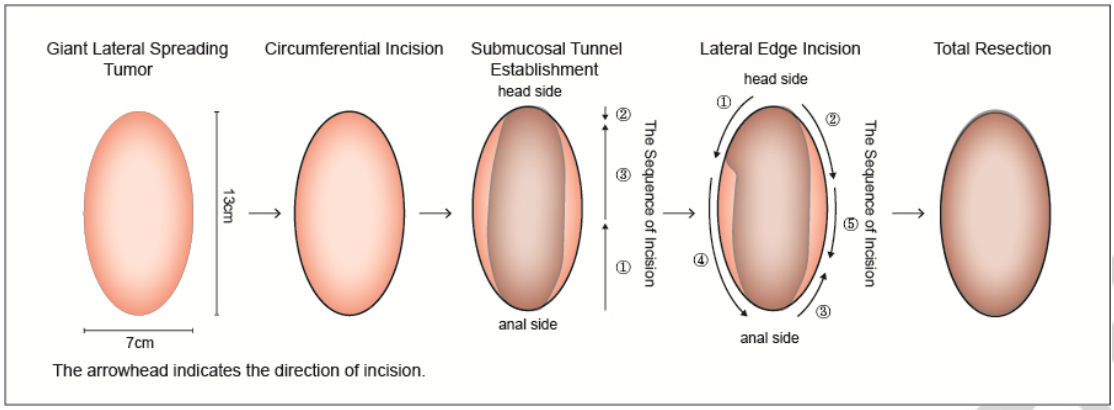

Fig. 2. Schematic diagram of the tunnel-assisted ESD surgery. After making a circumferential incision around the neoplasm, a submucosal tunnel along the longitude axis was created. After tunnel completion, the lateral edges were then dissected in sequence. The tumor was finally taken out from the lumen after total dissection.

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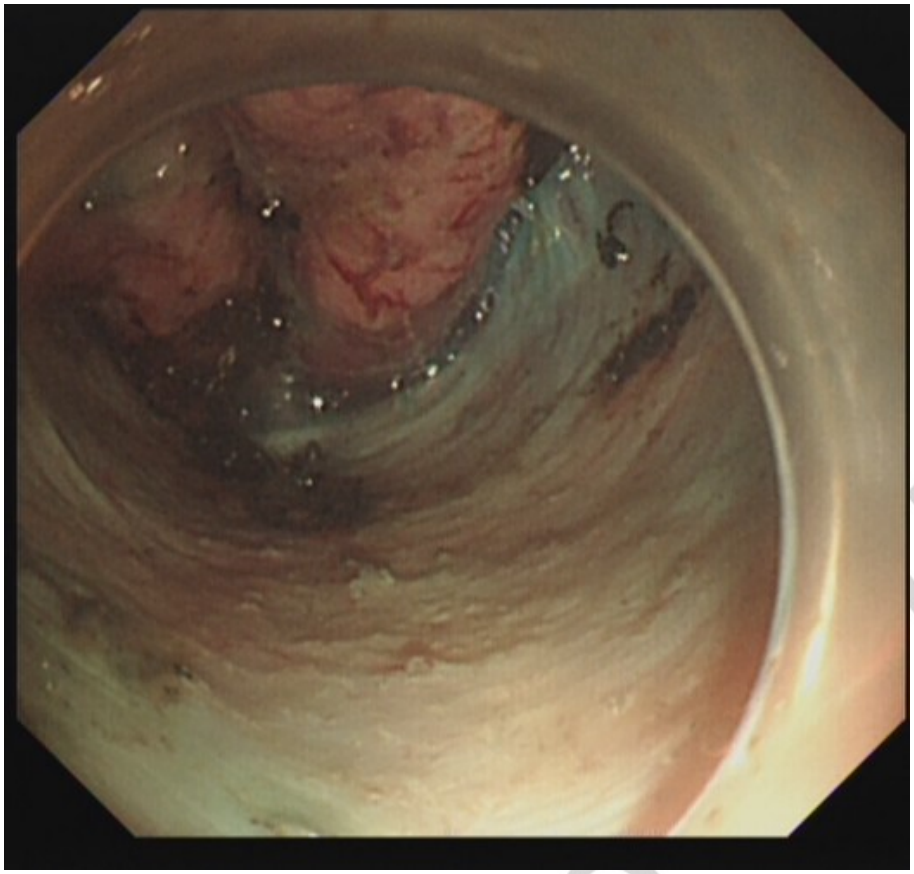

Fig. 3. View from the anal side of the submucosal tunnel before tunnel completion.