Double clip and rubber band traction-assisted endoscopic submucosal dissection (ESD) has been previously shown to be effective and safe for difficult colonic ESDs, such as those for recurrent lesions with severe fibrosis or for lesions invading the appendiceal orifice [1, 2]. Subepithelial lesions can also be removed by double clip and rubber band traction-assisted ESD [3]. “Spider-traction” ESD was recently reported to improve both the effectiveness and speed of ESD [4].

A 60-year-old patient with a history of appendectomy was diagnosed with a protruding subepithelial lesion at the site of the previous appendectomy (▶ Fig. 1 a). We scheduled endoscopic removal of this lesion with spider-traction ESD so as to obtain a perfect histological diagnosis and try to avoid unnecessary surgery. After with glycerol mixed with indigo carmine had been injected submucosally, circumferential incision trimming of the edges was done using a DualKnife (Olympus, Tokyo, Japan). The spider-traction system was then placed on the precut lesion (▶ Video 1). With the creation of four-quadrant traction using our system, better visibility of the cutting plan and a wider submucosal space for dissection were obtained (▶ Fig. 1 b). We were able to finish complete en bloc resection of this subepithelial lesion, without any adverse events, in 25 minutes (▶ Fig. 1 c, d). We decided to close the ulcer bed with five clips to prevent delayed complications (▶ Fig. 2). The final pathology result revealed fatty fibrous change, with an R0 resection.

ESD of subepithelial lesions in difficult locations, such as in the appendiceal orifice, is effectively possible with our spider-traction system. It was possible to pull the lesion completely out of the orifice, facilitating submucosal dissection. Pathological analysis confirmed that this was a completely benign lesion and...
surgery was avoided. A multitraction system, like the spider-traction system, pushes the limits of ESD for challenging lesions.

Competing interests

The authors declare that they have no conflict of interest.

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