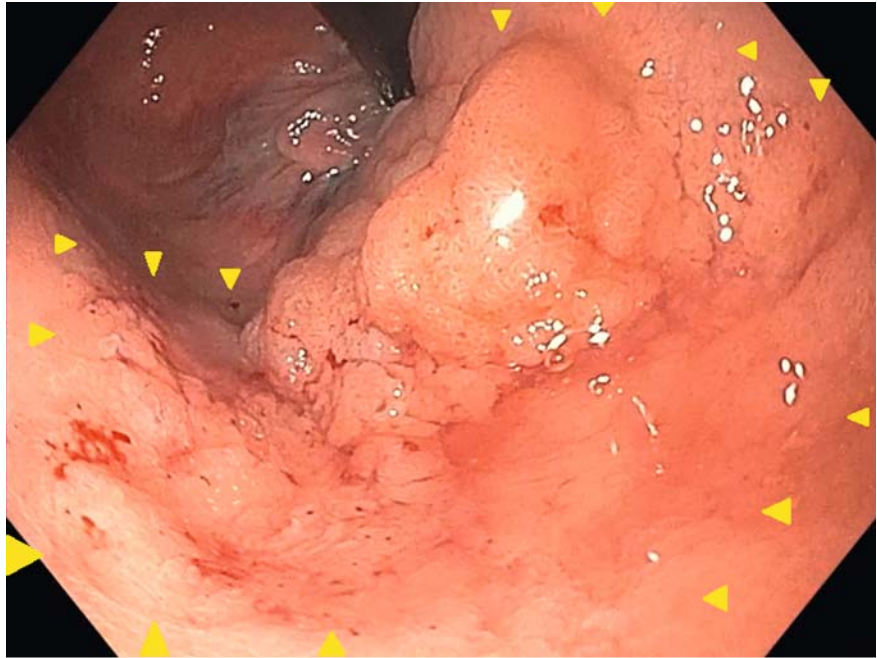


## Combined endoscopic submucosal dissection and transanal minimally invasive surgery for resection of large refractory rectal polyp

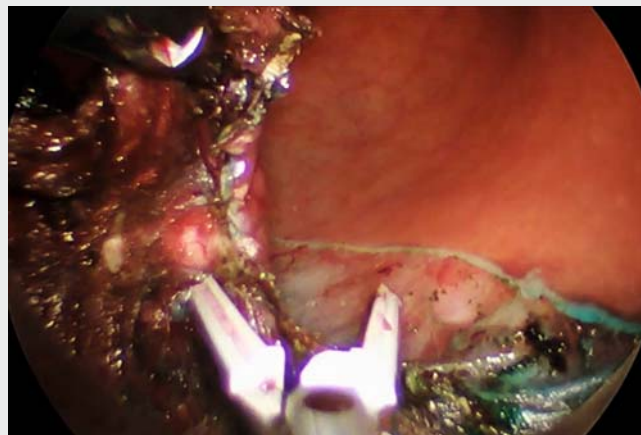
Advances in endoscopy and surgery allow for rectal preservation in early-stage tumors. Endoscopic options include endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD). EMR has an increased risk of piecemeal resection with a high recurrence rate, ranging from 10% to 23% [1]. Predictive factors for a difficult ESD include severe submucosal fibrosis and large tumor size [2]. Transanal minimally invasive surgery (TAMIS) is the surgical option for rectal tumor excision. Because of the risk of development of a rectovaginal fistula, anterior lesions in female patients are contraindicated for the TAMIS procedure. In this report, we present the case of a recurrent rectal tumor following multiple attempted EMRs, which was managed by combined ESD-TAMIS.

A frail, 84-year-old woman presented with a recurrent 5-cm rectal polyp after two attempts at removal by EMR. Previous pathology after EMR showed a tubular adenoma. The rectal polyp (Paris 0-IIa+Is) contained multiple scars, extended from the dentate line, and encompassed 50% of the circumference in the left lateral and anterior positions of the rectal wall (► **Fig. 1**). Endoscopic ultrasound showed a polypoid component involving only the mucosal layer without perirectal lymphadenopathy.

A combined ESD-TAMIS procedure was performed in order to overcome the procedural difficulty of the lesion's severe submucosal fibrosis and the anterior location abutting the vagina (► **Video 1**). A transanal mucosectomy of the polyp was performed in the left lateral and anterior position. ESD of the anterior rectal polyp was then performed. The remaining polyp was resected using the TAMIS port. The rectal polyp was removed en bloc. The full-thickness resection from the TAMIS procedure was closed with a running 2–0 Vicryl suture. Pathology confirmed complete excision of the rectal tubular adenoma.



► **Fig. 1** A 5-cm rectal polyp (arrowheads) with multiple scars in the left lateral and anterior positions of the rectal wall.



► **Video 1** Combined endoscopic submucosal dissection and transanal minimally invasive surgery (ESD-TAMIS) for a large rectal polyp containing multiple scars. ESD was performed on the part of the polyp located on the anterior rectal wall, followed by TAMIS of the remaining polyp.

At 1 month follow-up, the patient was eating well and having three bowel movements per day.

Endoscopy\_UCTN\_Code\_TTT\_1AQ\_2AD

### Competing interests

None

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