Complete resection of a 225-mm circumferential rectosigmoid intramucosal carcinoma by endoscopic submucosal dissection

A 58-year-old man presented with a fully circumferential, granular-type, laterally spreading tumor in the rectosigmoid (Fig. 1a, Fig. 1b), which was diagnosed as an intramucosal cancer using magnifying endoscopy. En bloc resection was accomplished by endoscopic submucosal dissection (ESD) using the pocket-creation method [1]. Three submucosal pockets were created, leaving submucosal tissue between the pockets to maintain traction until the end of the ESD procedure. Circumferential mucosal incision at the proximal border of the cylindrical tumor was performed before completion of submucosal dissection in order to avoid visual interference of a flap from the resected distal portion. The resected tumor was extracted by defecation (Fig. 1c, Fig. 1d) [2]. Pathological examination showed an intramucosal, well-differentiated, adenocarcinoma in an adenoma, with negative resection margins and no lymphovascular invasion. The patient was discharged without complications. Betamethasone suppositories (1.0 mg/day) were given for 8 weeks to prevent stricture formation. Although the patient remained free of obstructive symptoms, follow-up colonoscopy at 2 months revealed stenosis at the ESD site. This was dilated using endoscopic submucosal dissection (ESD) at 2 months, and at 7 months the patient remained asymptomatic. In this patient, a 210-mm-long circumferential tumor axis 225 mm circumferential rectosigmoid intramucosal carcinoma.

Endoscopic submucosal dissection of a 210-mm-long (longest tumor axis 225 mm) circumferential rectosigmoid intramucosal carcinoma.

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### References

Fig. 1  Endoscopic submucosal dissection (ESD) of a circumferential rectosigmoid intramucosal carcinoma. a, b Endoscopic view of a large circumferential laterally spreading tumor (granular, mixed-nodular type) extending from the upper rectum to the rectosigmoid. c The en bloc resected cylindrical specimen. The dissection time was 662 minutes. A total of 225 mL of 0.4% sodium hyaluronate was injected during the ESD procedure. d The opened specimen measured 220 × 140 mm (longest specimen axis 247 mm), with the tumor occupying 210 × 140 mm (longest tumor axis 225 mm). e Endoscopic view during the first endoscopic balloon dilation session 2 months after ESD. f The ESD site 4 months after ESD and after three dilation sessions.