ORIGINAL ARTICLE

Circumferential endoscopic submucosal dissection of distal rectal polyp in a patient with portal hypertension complicated by bowel obstruction



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A 61-year-old man with a history of Crohn ileocolitis status post total colectomy and ileorectal anastomosis (at 20 cm from anal verge) was found to have a circumferential flat rectal adenoma during a surveillance (Fig. 1). It was difficult to delineate the polyp because of inflammatory changes of colitis including pseudo-polyps. The polyp was biopsied and showed to be a tubular adenoma. There were no other synchronous lesions. The patient was not on any biologics then. He was being treated with low-dose prednisone for Wegner's granulomatosis. His other comorbidities included primary sclerosing cholangitis and portal hypertension with bleeding varices. The decision was

Figure 1. Distal rectal polyp on chromoendoscopy.

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made to proceed with endoscopic submucosal dissection. The polyp was removed using a combination of the pocket creation method and the tunning dissection technique (Video 1, available online at www.videogie.org). ^{1,2} Significant scarring and large blood vessels were encountered

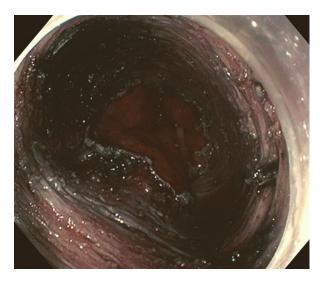


Figure 2. Post–endoscopic submucosal dissection appearance.

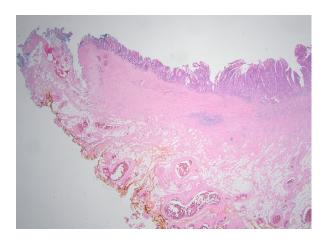


Figure 3. Endoscopic submucosal dissection specimen. The deep margin is inked yellow and the lateral mucosal margin is inked blue (H&E, orig. mag. $\times 1.25$).

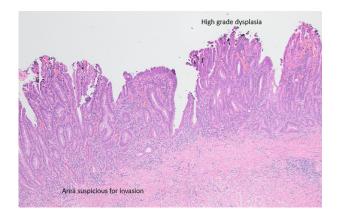


Figure 4. High-grade dysplasia on the right and focal area suspicious for invasion on the left (H&E, orig. mag. ×4).

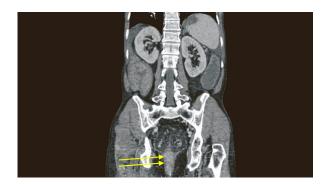


Figure 5. Distal rectum/anal canal stenosis on CT scan.

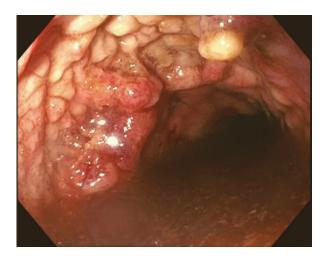


Figure 6. Post–endoscopic submucosal dissection ulcer at 3 weeks.

in the submucosal space (Fig. 2). The procedure lasted for a total of 6 hours. The patient was discharged home the same day. The oral prednisone was increased to 15 mg daily for 3 days followed by the prior dose of 5 mg daily. The final pathology revealed a tubular adenoma with extensive high-grade dysplasia and changes suspicious for



Figure 7. Post-endoscopic submucosal dissection ulcer at 8 weeks.

superficial T1 cancer and R0 resection margins (Figs. 3 and 4). He developed bowel obstruction with a transition point in the distal rectum-anal canal junction 3 weeks after resection (Figs. 5 and 6). This was successfully treated with a balloon dilation to 20 mm with good resolution of symptoms. He was dilated 3 additional times over the next 5 months without any recurrent obstruction (Fig. 7). He was eventually placed on vedolizumab for treatment of his colitis. He remains on strict surveillance with high definition and virtual chromoendoscopy examination every 6 months for detection of any metachronous dysplasia. We demonstrate a case of successful resection of a large circumferential rectal polyp in the background of Crohn ileocolitis and successful management of post-resection rectal stenosis with serial dilations.

DISCLOSURE

The authors disclosed no financial relationships.

REFERENCES

- Zou J, Chai N, Linghu E, et al. Efficacy and safety of endoscopic submucosal tunnel dissection for rectal laterally spreading tumors. Surg Endosc 2021;35:4356-62.
- Hayashi Y, Miura Y, Yamamoto H. Pocket-creation method for the safe, reliable, and efficient endoscopic submucosal dissection of colorectal lateral spreading tumors. Dig Endosc 2015;27:534-5.
- Hayashi T, Kudo SE, Miyachi H, et al. Management and risk factor of stenosis after endoscopic submucosal dissection for colorectal neoplasms. Gastrointest Endosc 2017;86:358-69.
- Ohara Y, Toyonaga T, Tanaka S, et al. Risk of stricture after endoscopic submucosal dissection for large rectal neoplasms. Endoscopy 2016;48: 62-70.
- Murthy SK, Feuerstein JD, Nguyen GC, et al. AGA clinical practice update on endoscopic surveillance and management of colorectal dysplasia in inflammatory bowel diseases: expert review. Gastroenterology 2021;161: 1043-51.e4.