Underwater endoscopic resection of a neuroendocrine rectal tumor

Fig. 1 Neuroendocrine rectal tumor in a 51-year-old woman.

Fig. 2 Underwater appearance of the same lesion.

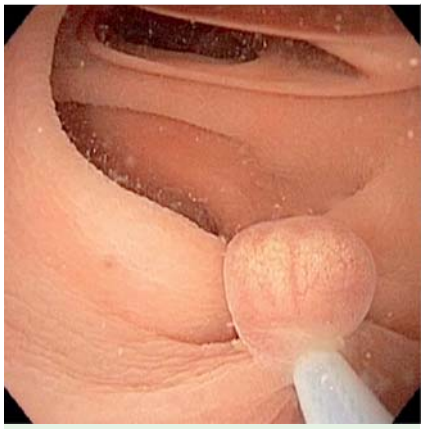

Fig. 3 Underwater resection with a snare.

Fig. 4 Appearance after resection, with no residual lesion.

The endoscopic resection of rectal neuroendocrine tumors (NETs) results in good long-term outcomes [1]. Many techniques for the endoscopic resection of rectal NETs have been described, including polypectomy, endoscopic mucosal resection (EMR), and recently EMR with band ligation [2], endoscopic submucosal dissection [3], and even transanal endoscopic microsurgery [4]. Underwater endoscopic resection is a simple and inexpensive new technique that has been used for the treatment of polyps and flat lesions [5]. We present a case of rectal NET resected with an underwater technique (**Video 1**).

A 51-year-old woman was referred for the endoscopic treatment of a distal rectal NET. Colonoscopy revealed a yellowish, hardened, 10-mm lesion with a subepithelial aspect, compatible with NET (**Fig. 1**). Water was infused until the rectum lumen was completely filled (**Fig. 2**). An opened snare (SnareMaster; Olympus, Tokyo, Japan) was pushed against the rectal wall to capture a safe margin of normal mucosa (**Fig. 3**). Forced coagulation was used for the initial cutting, and endocut mode (ERBE Elektromedizin, Tübingen, Germany) was then used to complete the resection.

In the post-procedural examination, no sign of perforation or residual lesion was observed (**Fig. 4**). Histologic examination of the specimen revealed a well-differentiated grade 1 NET invading the deep submucosal layer with tumor-free resection margins and without angiolymphatic or perineural invasion.

Video 1

Underwater endoscopic resection of a neuroendocrine rectal tumor.

Underwater endoscopic resection of rectal NET can be a new treatment option and was feasible in this case. Case series are needed to confirm the efficacy of this technique.

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Competing interests: None

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Bibliography
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