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“Clip coupled with an elastic ring” internal traction for endoscopic submucosal dissection of a rectal neuroendocrine tumor: a junior endoscopist experience

Heng Li, Rui-Yue Shi, Jun Yao, Li-Sheng Wang, De-Feng Li

Department of Gastroenterology. Shenzhen People’s Hospital. The Second Clinical Medical College. Jinan University. The First Affiliated Hospital. Southern University of Science and Technology. Shenzhen, Guangdong. China

Correspondence: De-feng Li MD
e-mail: ldfl830712@163.com.

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Keywords: Rectal neuroendocrine tumor. Endoscopic submucosal dissection.

Dear Editor,

A rectal neuroendocrine tumor (NET) was found in a 64-year-old female during a cancer screening examination (Fig. 1A). Endoscopic ultrasonography (EUS) revealed a hypoechoic lesion (8.3 x 6.6 mm) originating from the submucosa layer (Fig. 1B).
“Clip coupled with an elastic ring” internal traction for endoscopic submucosal dissection (ESD) was used to remove the NET, according to the procedure removal of a duodenal tumor (1). The procedures were the following: 1) marking around the lesion with a margin of approximately 5 mm (Fig 1C); 2) submucosal injection and circumference incision around the lesion (Fig. 1D); 3) applied clip coupled with an elastic ring internal traction (Fig. 1E); 4) Submucosal injection (Fig. 1F); 5) precise dissection was performed with the NET being removed by en bloc resection (Fig. 1G and H); and 5) closure of the mucosal defect (Fig. 1I). Finally, histopathology confirmed a neuroendocrine tumor (Fig. 2).

Discussion

NETs are a group of rare, slow-growing and heterogeneous neoplasms, whereas small rectal NETs are still at risk of regional and even distant metastasis (2). Rectal NET can be removed endoscopically using various procedures, such as double ligation-assisted endoscopic submucosal resection, pre-traction-assisted ESD and endoscopic mucosal resection (EMR) (3-5). However, which of these approaches is the most effective and safe remains controversial. As junior endoscopists, we successfully removed the NET without any complications using a “clip coupled with an elastic ring” internal traction assisted ESD. This approach was easy and maneuverable, which may be a preferable approach for the junior endoscopists.

References


Fig. 1. A. A rectal neuroendocrine tumor (NET). B. Endoscopic ultrasound (EUS) showing a hypoechoic lesion originating from the submucosa layer. C. Marking of the lesion. D. Submucosal injection and circumference incision around the lesion. E. Clip coupled with elastic ring internal traction device. F. Submucosal injection. G and H. Precise layer and dissection with 

en bloc

resection. I. Mucosal defect closed. J-M. Immunohistochemistry showed that CD56 (A), CK (B), Ki67 (C) and SYN (D) were positive (X200).