

Elastic band ligation for the removal of a colonic tubular adenoma in a diverticulum



Fig. 1 a Sessile polyp in the neck of a diverticulum with intradiverticular extension, seen in a 56-year-old healthy patient undergoing colonoscopy after a positive fecal occult blood test result. b Narrow-band imaging shows a large tubular pit pattern.

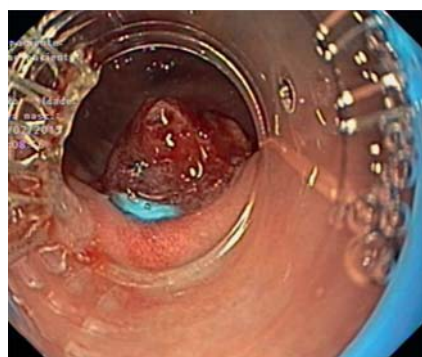


Fig. 2 The polyp is visible on the top of the inverted diverticulum.



Fig. 3 After 2 weeks, a cicatricial area is identified on the neck of the residual diverticulum, with no evidence of residual adenoma.

A 56-year-old healthy patient underwent colonoscopy after a positive fecal occult blood test result. This examination showed diverticulosis of the left side of the colon and, at 20 cm from the anal verge, a 6-mm sessile polyp in the neck of a diverticulum with intradiverticular extension (● Fig. 1 a). Narrow-band imaging showed a large tubular pit pattern: Kudo type III-L (● Fig. 1 b).

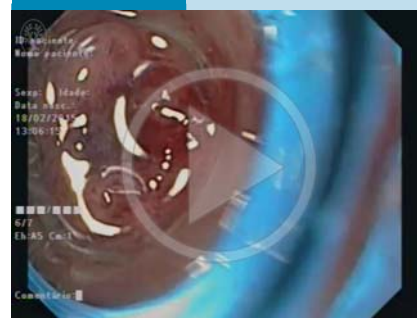
Using a gastroscope (GIF-Q165; Olympus, Tokyo, Japan) with a conventional band ligator device (Speedband Superview Super; Boston Scientific, Natick, Massachusetts, USA) attached to the tip, we positioned the diverticular orifice and the polyp in the center of the cap. The diverticulum (including the insertion area of the polyp) was then suctioned and partially inverted into the cap of the endoscopic ligator, and an elastic band was re-

leased around its neck (● Video 1). The polyp was visible on the top of the inverted diverticulum (● Fig. 2). Colonic tattooing was performed.

As a result of ischemia, necrosis, and cicatrization of the underlying tissues, the elastic band contents fell off in a few days [1]. Endoscopic evaluation 2 weeks later showed a residual diverticulum adjacent to the tattoo. A cicatricial area was identified on the neck of the residual diverticulum, with no evidence of residual adenoma (● Fig. 3).

Colonic diverticula do not have a muscular layer, so there is a high risk for perforation when a standard snare excision technique is used for polyps extending into diverticula. Elastic banding has recently been shown to be safe and highly effective in diverticular bleeding [2]. It appears that this technique may also be safe and effec-

Video 1



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tive for the resection of a colonic adenoma extending into a diverticulum [3]. It is also minimally invasive, so that perforation and the need to perform laparoscopy or apply an over-the-scope-clip to close it can be avoided [4,5]. However, no specimen is obtained for histopathological analysis, which probably limits the size and the pit pattern of the polyps in which this technique should be used.

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Competing interests: None

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References

- 1 Akimaru K, Suzuki H, Tsuruta H et al. Eversion and ligation of a diverticulum: report of an inspirational case and subsequent animal study. *J Nippon Med Sch* 2008; 75: 157–161
- 2 Ishii N, Setoyama T, Deshpande GA et al. Endoscopic band ligation for diverticular hemorrhage. *Gastrointest Endosc* 2012; 75: 382–387
- 3 Barker KB, Arnold HL, Fillman EP et al. Safety of band ligator use in the small bowel and the colon. *Gastrointest Endosc* 2005; 62: 224–227

- 4 *Fu KI, Hamahata Y, Tsujinaka Y.* Early colon cancer within a diverticulum treated by magnifying chromoendoscopy and laparoscopy. *World J Gastroenterol* 2010; 16: 1545–1547
- 5 *Valli PV, Kaufmann M, Vrugt B et al.* Endoscopic resection of a diverticulum-arisen colonic adenoma using a full-thickness resection device. *Gastroenterology* 2014; 147: 969–971

Bibliography

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