Post-Ligation Stricture: A Rare Complication

Fewer complications occur after endoscopic variceal ligation than after endoscopic variceal sclerotherapy (1–3). We report here the case of a patient who developed stricture after endoscopic variceal ligation.

A 32-year-old woman with noncirrhotic portal fibrosis, and with grade IV varices, coughed during her second session of endoscopic variceal ligation, leading to slipping of the band without the tripwire being pulled. A diagnostic endoscopy revealed a single band encircling two varices on opposite walls of the esophagus (Figure 1). The patient developed odynophagia. Endoscopy at one week showed ulcers on the opposite walls, and the scope could not be negotiated beyond the ulcers. A smooth stricture of 0.5 cm in diameter was seen after two weeks. The stricture was dilated to a diameter of 15 mm in two sessions using a Savary-Gilliard dilator. The varices were obliterated in a further two sessions of endoscopic variceal sclerotherapy.

Ligation leads to the formation of superficial ulcers, and subsequent stricture formation is therefore rare. Endoscopic variceal sclerotherapy leads to the formation of deeper ulcers (4), which on healing may progress to stricture formation (5). The present patient developed a stricture due to inadvertent banding of two varices with a single band at the same level. Those using the endoscopic variceal ligation technique should therefore bear in mind that if the patient coughs or retches during suction of a varix, there is a possibility of banding the opposite wall along with the varix, with subsequent stricture formation during healing.

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Figure 1a: Suction of a single varix. **b** The opposite varix entering the cylinder during suction. **c** The resulting partial ligation of two varices with a single band.

References

1. Stiegmann GV, Goff JS, Michaletz-Onody PA, et al. Endoscopic sclerotherapy as compared with endoscopic ligation for bleeding esophageal varices. *N Engl J Med* 1992; 326: 1527–32.
2. Laine L, El-Newihi HM, Migikovsky B, et al. Endoscopic ligation compared with sclerotherapy for the treatment of bleeding esophageal varices. *Ann Intern Med* 1993; 119: 1–7.
3. Hashizume M, Ohta M, Ueno K, et al. Endoscopic ligation of esophageal varices compared with injection sclerotherapy: a prospective randomized trial. *Gastrointest Endosc* 1993; 39: 123–6.
4. Ayres SJ, Goff JS, Warren GH. Endoscopic sclerotherapy for bleeding esophageal varices: effects and complications. *Ann Intern Med* 1983; 98: 900–3.
5. Sorensen TIA, Burcharth F, Pedersen ML, et al. Esophageal stricture and dysphagia after endoscopic sclerotherapy for bleeding varices. *Gut* 1984; 25: 473–7.

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