Sengstaken–Blakemore tube: an unusual complication

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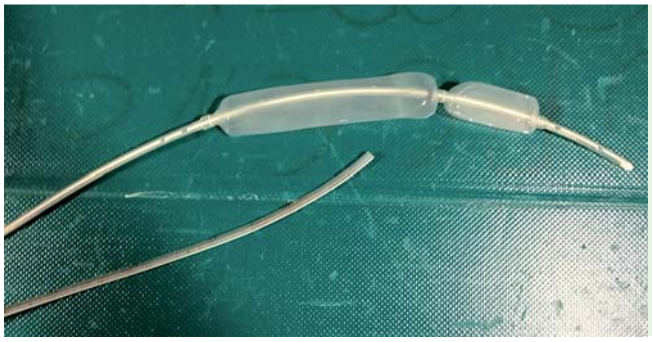

Fig. 1 Transected Sengstaken–Blakemore tube compared with a complete tube (upper tube).

Acute variceal bleeding is a life-threatening event. Endoscopic band ligation is currently the recommended treatment [1]; however, in the case of reduced variceal volume, injection therapy with polidocanol or Histoacryl may be more appropriate. If both endoscopic options fail, placement of a Sengstaken–Blakemore tube should be considered [2], although other endoscopic therapies can be used [3].

A 54-year-old man with a known history of compensated alcoholic cirrhosis presented in the emergency room with acute hematemesis. The vital signs were stable and laboratory workup showed mild anemia and thrombocytopenia. Upper endoscopy revealed a peptic esophagitis with confluent ulceration and a spurting variceal hemorrhage in the cardia. After injection of 10 ml of 1% polidocanol, that did not control the bleeding, a Sengstaken–Blakemore tube (Cliny type 42; Create Medic Co, Yokohama, Japan) was positioned, with 250 ml of air insufflated in the gastric balloon and 80 ml in the esophageal balloon. For traction maintenance, a 500-ml bag of saline was used, as was regular practice. However, after 10 minutes part of the tube suddenly became exteriorized (**Fig. 1**). As the video demonstrates (**Video 1**) the extremity with the deflated balloon, because of spontaneous transection 3 cm proximally to the balloon insertion, was still in place. It was decided to remove the tube with a snare. On revision there was no active bleeding, hence no treatment was carried out.

The use of a Sengstaken–Blakemore tube is increasingly rare, mostly because of the high incidence of complications, such as aspiration pneumonia, airway obstruction, pressure necrosis of the mucosa, esophageal rupture, and cardiac inflow obstruction [4–6]. To our knowledge this is the first video showing the extraction of a Sengstaken–Blakemore tube that had transected probably because of a manufacturing defect. To prevent this situation a careful assessment of the tube must be made before placement. Besides the very successful resolution using a standard endoscopic extraction procedure, we emphasize the rarity of the video images of this unusual situation.

Video 1

Extraction of a transected Sengstaken–Blakemore tube. A deflated tube was still in place and it was removed with a snare.

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References

1 *Villanueva C, Piqueras M, Aracil C* et al. A randomized controlled trial comparing ligation and sclerotherapy as emergency endoscopic treatment added to somatostatin in acute variceal bleeding. J Hepatol 2006; 45: 560–567
2 *Panés J, Terés J, Bosch J* et al. Efficacy of balloon tamponade in treatment of bleeding gastric and esophageal varices. Results in 151 consecutive episodes. Dig Dis Sci 1988; 33: 454–459
3 *Holster IL, Kuipers EJ, van Buuren HR* et al. Self-expandable metal stents as definitive treatment for esophageal variceal bleeding. Endoscopy 2013; 45: 485–488
4 *Lin CT, Huang TW, Lee SC* et al. Sengstaken–Blakemore tube related esophageal rupture. Rev Esp Enferm Dig 2010; 102: 395–396
5 *Nielsen TS, Charles AV*. Lethal esophageal rupture following treatment with Sengstaken–Blakemore tube in management of variceal bleeding: a 10-year autopsy study. Forensic Sci Int 2012; 222: e19–e22
6 *De Cock D, Monballyu P, Voigt JU* et al. Extracardiac compression and left ventricular inflow obstruction as a complication of a Sengstaken–Blakemore tube. Eur J Echocardiogr 2011; 12: 973

Bibliography

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