

Sengstaken–Blakemore tube: an unusual complication



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 mainte-

nance, 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.

Endoscopy_UCTN_Code_CPL_1AH_2AC

Competing interests: None

Bruno M. Gonçalves¹, Ana C. Caetano^{1,2,3}, Dália Fernandes¹, Armanda Cruz¹, Pedro Bastos¹, Carla Rolanda^{1,2,3}

¹ Department of Gastroenterology, Hospital Braga, Portugal

² Life and Health Sciences Research Institute (ICVS), School of Health Sciences, University of Minho, Braga, Portugal

³ ICVS/3B's – PT Government Associate Laboratory, Braga/Guimarães, Portugal

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

DOI <http://dx.doi.org/10.1055/s-0033-1358924>
 Endoscopy 2013; 45: E434
 © Georg Thieme Verlag KG
 Stuttgart · New York
 ISSN 0013-726X

Corresponding author

Bruno M. Gonçalves, MD
 Serviço de Gastrenterologia
 Hospital de Braga
 Sete Fontes – São Victor
 4710-243 Braga
 Portugal
 Fax: +351-25-3027999
 brunomgoncalves@gmail.com

Video 1

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