Closure of a persistent esophagopleural fistula assisted by a novel endoscopic suturing system

Gastrointestinal fistulas may be successfully managed endoscopically [1]. Novel endoscopic techniques for full thickness tissue approximation may serve as adjuvants for assisting fistula closure [2, 3]; an example is a flexible endoscopic suturing system [4]. We describe a case of a chronic esophageal fistula, treated previously with endoscopic clipping and esophageal stenting, which was successfully managed using a novel endoscopic suturing system [5].

A 66-year-old woman presented with a 3-month history of a chronic esophagopleural fistula secondary to Boerhaave syndrome. The fistula was initially drained by thoracostomy and subsequently treated with endoscopic clipping and esophageal stenting, which was successfully managed using a novel endoscopic suturing system [5].

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previously. There was no contrast extravasation post suturing, and it was elected not to place a stent. The total procedure time was 90 minutes (20 minutes for the actual suturing procedure).

Follow-up endoscopy and contrast examination of the esophagus after the second suturing procedure showed complete fistula closure (Fig. 3).

Fig. 3 Endoscopic view of the existing esophagopleural fistula opening 2 cm above the esophagogastric junction (white arrow) prior to initializing the suturing procedure. Note retained sutures from a previous suturing attempt.

Endoscopy_UCTN_Code_TTT_1AO_2AI

Competing interests: Dr. Gostout is a member of the Apollo group which conceptualized the suturing system. Dr. Gostout is an advisor to Apollo Endosurgery. Both he and the Mayo Clinic hold equity in this company. Drs. Louis Wong Kee Song, Juliane Bingener and Eduardo A. Bonin have nothing to disclose. Zachary Gostout was a former employee of Apollo Endosurgery, Inc., developer of the Over-Stitch device.

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DOI http://dx.doi.org/10.1055/s-0031-1291494
Endoscopy 2012; 44: E8–E9
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

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