A 72-year-old woman was treated with endotracheal intubation and mechanical ventilation for shock caused by herbicide poisoning. After extubation she presented with cough. Tracheoscopy and gastroscopy both showed a perforation measuring about 1 cm (▶Fig. 1a, b). The tracheoesophageal fistula (TEF) was treated with a purse-string suture via a gastroscope (GIF-Q260J; Olympus, Tokyo, Japan) (▶Video 1). In brief, an endoloop (Leo Medical, Changzhou, China) was inserted by forceps and anchored onto the full thickness of the edge of the fistula, including both the esophageal wall and the tracheal wall, with a titanium clip (Micro-Tech, Nanjing, China) (▶Fig. 1c). After adjustment of the angle, three additional repositionable clips were used to secure the endoloop on different sides of fistula. The removable hook was then inserted and connected with the ring on the tail of the endoloop, which was tightened to pull the edges of the fistula together. The hook was then removed and the TEF was closed (▶Fig. 1d). To further strengthen the closure of the fistula, an endoclip was added to clamp the still visible small hole (▶Fig. 1e). The patient was put on nasal feeding after operation and her cough took a turn for the better.

One month later, gastroscopy showed that the endoclips and endoloop had fallen off and the fistula was reduced to 0.3 cm (a), which was clamped with three clips (b).

The patient was put on nasal feeding after operation and her cough took a turn for the better.

One month later, gastroscopy showed that the endoclips and endoloop had fallen off and the fistula was reduced to 0.3 cm (a), which was clamped with three clips (b).
fallen off and the fistula was reduced to 0.3 cm, which was clamped with three clips (▶ Fig.2). Another 3 months later, gastroscopy and upper gastrointestinal radiography revealed the fistula to have closed (▶ Fig.3).

TEF is a severe complication of endotracheal intubation [1]. Owing to the high position of postintubation TEF, it is difficult to place a tracheal or esophageal stent, and surgical correction is usually the only solution [2]. In our case, we performed a purse-string suture to reduce the fistula, and then successively closed the reduced fistula with titanium clips. This endoscopic procedure may be an alternative to surgery for postintubation TEF.

Competing interests
The authors declare that they have no conflict of interest.

The authors
Shu Huang¹, Sumin Zhu², Siming Guo³, Xuan Zhao³
1 Department of Gastroenterology, People’s Hospital of Lianshui, Huai’an, P. R. China
2 Department of Gastroenterology, Second Affiliated Hospital, Xuzhou Medical University, Xuzhou, P. R. China

Corresponding author
Sumin Zhu, MD
Department of Gastroenterology, Second Affiliated Hospital, Xuzhou Medical University, 32 Meijian Road, Xuzhou 221006, P. R. China
njzhusumin@163.com

References

Bibliography
Endoscopy 2022; 54: E707–E708
DOI 10.1055/a-1769-4481
ISSN 0013-726X
published online 28.2.2022
© 2022. Thieme. All rights reserved.
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos
Endoscopy E-Videos is an open access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online. Processing charges apply (currently EUR 375), discounts and waivers acc. to HINARI are available.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos

E708 Huang Shu et al. Purse-string suture combined ... Endoscopy 2022; 54: E707–E708 | © 2022. Thieme. All rights reserved.