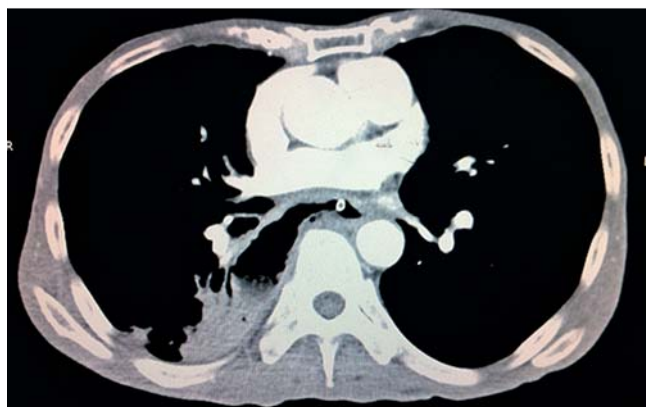


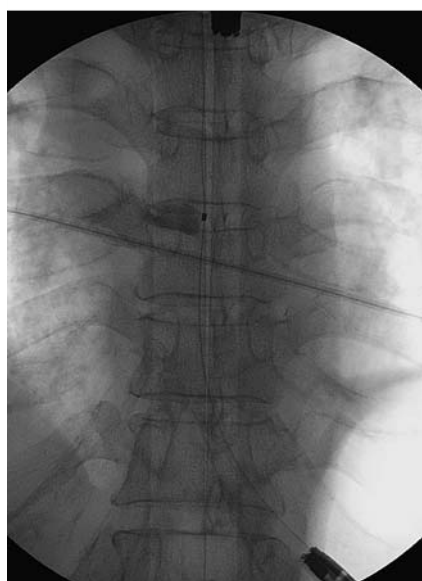
## Complete obstructive esophageal cancer with esophagopleural fistula successfully treated by combined antegrade and retrograde rendezvous technique



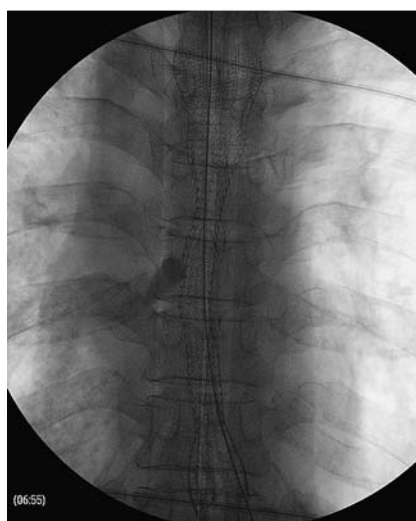
**Fig. 1** Computed tomography (CT) scan showing the esophagopleural fistula.



**Fig. 2** The guide wire passing through the percutaneous endoscopic gastrostomy (PEG) exit site.



**Fig. 3** Fluoroscopic view showing simultaneous endoscopy with the combined antegrade and retrograde rendezvous technique.



**Fig. 4** Fluoroscopic view following insertion of the esophageal stent.

A 56-year-old man with advanced esophageal cancer who had undergone percutaneous endoscopic gastrostomy (PEG) 4 months previously presented to our unit with refractory coughing and chest discomfort for 3 months. He had refused chemotherapy. Computed tomography (CT) scan showed a large esophagopleural fistula (● Fig. 1) and the insertion of an esophageal stent was planned.

Endoscopy revealed a tight stricture at mid-esophageal level with irregular mucosa. A guide wire could not be passed into the stomach because it repeatedly

passed through the large fistula opening and into the pleural cavity. Therefore, it was decided to attempt esophageal stent placement by the combined antegrade and retrograde rendezvous technique [1–4] using both a standard gastroscope and an ultraslim gastroscope (GIF-XP-160, Olympus, Tokyo, Japan) simultaneously.

Firstly, the PEG tube was removed; then the guide wire was inserted into the stomach and the ultraslim gastroscope was passed over the guide wire. Next, the guide wire was manipulated via the PEG-snare plastic tube in a retrograde direction from the gastric cardia until it was successfully passed through the fistula

and the area of the stricture into the upper part of the esophagus (● Fig. 2).

Esophagoscopy using a standard gastroscope was performed in order to grasp the guide wire and pull it back through the patient's mouth while the other end of the wire remained outside the abdominal cavity (● Fig. 3).

The stricture was successively dilated using a 4–6-Fr Soehendra dilator, a 6–9-Fr Soehendra dilator, and a 5–8-mm bougie dilator. A fully covered esophageal self-expanding metal stent (SEMS; Ultraflex, Boston Scientific, USA) 18 × 120 mm was inserted via the oral route and deployed in a good position under fluoroscopic guidance (● Fig. 4).

The patient's respiratory symptoms disappeared 48 hours after the procedure and there were no complications. At follow-up after 8 weeks, he remained well without symptoms and a barium swallow showed no evidence of leakage.

To our knowledge, this is the first case reported that has used this technique for closure of an esophagopleural fistula. The technique has potential benefit for other difficult cases that need an additional abdominal route for retrograde placement of a guide wire. We believe in future it may be possible to perform the technique via the PEG exit site only or with laparoscopic assistance.

Endoscopy\_UCTN\_Code\_TTT\_1AO\_2AI

**Competing interests:** None

**V. Prachayakul, P. Aswakul, U. Kachintorn**

Siriraj Endoscopy Center, Siriraj Hospital, Bangkok, Thailand

## References

- 1 *Maple JT, Peterson BT, Baron TH et al.* Endoscopic management of radiation-induced complete upper esophageal obstruction with an antegrade-retrograde rendezvous technique. *Gastrointest Endosc* 2006; 64: 822–828
- 2 *Schembre D, Dever JB, Bayles S et al.* Esophageal reconstitution by simultaneous antegrade/retrograde endoscopy: re-establishing patency of the complete obstructed esophagus. *Endoscopy* 2011; 43: 434–437
- 3 *Bueno R, Swanson JS, Jaklitsch MT et al.* Combined antegrade and retrograde dilation: a new endoscopic technique in the management of complex esophageal obstruction. *Gastrointest Endosc* 2001; 54: 368–372
- 4 *Al-Haddad M, Pungpapong S, Wallace MB et al.* Antegrade and retrograde endoscopic approach in the establishing of a neo-esophagus: a novel technique. *Gastrointest Endosc* 2007; 65: 290–294

## Bibliography

**DOI** 10.1055/s-0030-1256858

*Endoscopy* 2011; 43: E354–E355

© Georg Thieme Verlag KG Stuttgart · New York · ISSN 0013-726X

## Corresponding author

**P. Aswakul, MD**

Siriraj Endoscopy Center  
Siriraj Hospital – Internal Medicine  
Prannok Road  
Bangkok 10700  
Thailand  
Fax: +66-2412-1088  
asawakul@gmail.com