A 60-year-old man, with a history of surgery followed by chemoradiotherapy for cardiac cancer 5 years ago, was referred for backache and hematemesis. The abdominal computed tomography angiography (CTA) revealed a pseudoaneurysm of the descending thoracic aorta (▶ Fig. 1). Emergency endovascular repair was performed during which contrast media extravasated outside the descending aorta and flowed into the esophagus (▶ Fig. 2) before stent graft insertion. The endovascular intervention was successful, but bloody fluid was still drained from the stomach tube, together with hematochezia. A bedside gastroscopy was therefore arranged to detect ongoing or recurrent gastrointestinal bleeding. Endoscopy initially revealed profuse bleeding and massive blood clots, making it hard to identify bleeding points (▶ Fig. 3). The modified external cannula was assembled and used to eliminate the clots (▶ Fig. 4, ▶ Video 1) [1]. After suctioning and washing multiple times, the visual field was improved. The esophageal wall was rough and uneven with a patchy hemorrhage (▶ Fig. 3), and a huge fistula was spotted at 25 cm from the incisors, ruling out fatal bleeding (▶ Fig. 5, ▶ Video 1). The whole procedure lasted for 10 minutes. Drugs, such as a proton pump inhibitor and hemostatics, were continued without a second surgery after discussion with surgeons.
The bleeding then stopped with stable vital signs and hemoglobin, and the gastroscopy 5 days later showed no bleeding. The modified external cannula is an innovative device for efficient removal of massive blood clots, especially during bedside endoscopic hemostasis, and has already shown great clinical value [1]. In this case, persistent bleeding significantly hindered endoscopic assessment, which was resolved by the modified device. The esophageal mucosa was cleaned and the fistula emerged, ruling out major bleeding and avoiding a second surgery. The additional diagnostic potential of the external cannula was fully realized, which greatly adds to its clinical benefit.

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Competing interests

The authors declare that they have no conflict of interest.

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