

Rendezvous in WONderland: combined percutaneous and transluminal approach for an undrained area of massive walled-off necrosis

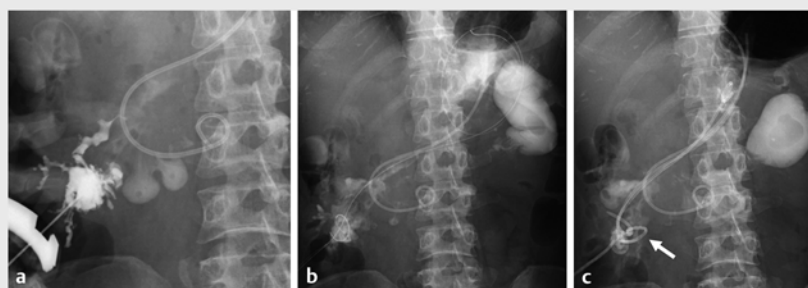
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► **Fig. 1** Computed tomography image delineating a residual cavity of walled-off necrosis in the right paracolic gutter.

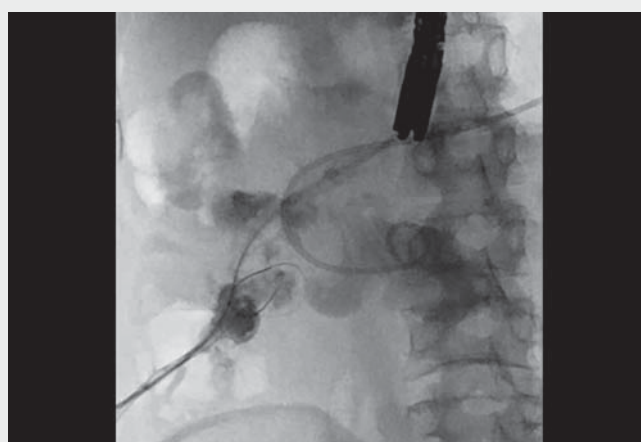
The advent of lumen-apposing metal stents (LAMSs) has expanded opportunities for the endoscopic management of symptomatic walled-off necrosis (WON) through increasing drainage efficiency and facilitation of subsequent endoscopic necrosectomy [1,2]. Peripheral areas of massive WON may however not be endoscopically accessible, potentially hampering treatment success [3].

A 38-year-old woman was admitted for endoscopic management of infectious WON. Endoscopic ultrasound (EUS)-guided drainage was undertaken using a 15-mm LAMS (Hot AXIOS; Boston Scientific Japan, Tokyo, Japan). Resolution of the WON was achieved with four sessions of necrosectomy, and the LAMS was replaced with plastic stents. On follow-up computed tomography performed 2 months later, recurrence of the collection was documented in the right paracolic gutter, extending to the erector spinae muscles, with deterioration of inflammatory markers also noted (► **Fig. 1**).

Endoscopic drainage of the recurrent collection was attempted through the transgastric fistula. Despite the use of various types of guidewire, along with a bendable cannula, passage of the guidewire to the peripheral paracolic collection failed. A decision was therefore made to perform percutaneous puncture of the collection



► **Fig. 2** Fluoroscopic images of the rendezvous technique based on combined percutaneous and transluminal approaches showing: **a** ultrasonography-guided percutaneous puncture of the walled-off necrosis (WON) cavity in the right paracolic gutter; **b** the guidewire that was successfully passed into the stomach through the percutaneous puncture route; **c** a nasocystic catheter and plastic stent in the WON cavity in the right paracolic gutter.



► **Video 1** The rendezvous technique based on combined percutaneous and transluminal approaches is used for an undrained area of walled-off necrosis.

and conduct a rendezvous maneuver (► **Fig. 2**). Following ultrasonography-guided percutaneous puncture of the collection, a guidewire was passed to the stomach. We reinserted a therapeutic duodenoscope and grasped the remaining guidewire using a snare. Finally, endoscopic access to the paracolic collection was achieved over the rendezvous guidewire, and a 7-Fr double-pigtail stent and a 7-Fr pigtail nasobiliary catheter were suc-

cessfully deployed. When resolution of the collection had been achieved, the nasocystic and percutaneous catheters were removed, with the plastic stent kept in situ.

Although the percutaneous approach can help in the drainage of peripheral areas of large-sized WON [4,5], patient discomfort and pancreaticocutaneous fistulas are potential disadvantages. The percutaneous-transluminal rendezvous

technique (► **Video 1**) enables not only extensive drainage of the WON, but also conversion to internal drainage.

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Competing interests

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References

- [1] Yasuda I, Takahashi K. Endoscopic management of walled-off pancreatic necrosis. *Dig Endosc* 2021; 33: 335–341
- [2] Bang JY, Varadarajulu S. Lumen-apposing metal stents for endoscopic ultrasonography-guided interventions. *Dig Endosc* 2019; 31: 619–626
- [3] Zhai YQ, Ryou M, Thompson CC. Predicting success of direct endoscopic necrosectomy with lumen-apposing metal stents for pancreatic walled-off necrosis. *Gastrointest Endosc* 2022; 96: 522–529.e1
- [4] Yamamoto N, Isayama H, Takahara N et al. Percutaneous direct-endoscopic necrosectomy for walled-off pancreatic necrosis. *Endoscopy* 2013; 45 (Suppl. 02): E44–E45
- [5] Arvanitakis M, Dumoncean J-M, Albert J et al. Endoscopic management of acute necrotizing pancreatitis: European Society of Gastrointestinal Endoscopy (ESGE) evidence-based multidisciplinary guidelines. *Endoscopy* 2018; 50: 524–546

Bibliography

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