

Percutaneous endoscopic necrosectomy using an automated rotor resection device in severe necrotizing pancreatitis

Endoscopic transgastric necrosectomy is a first-line treatment for infected pancreatic necroses following acute pancreatitis [1, 2]. However, the accessibility of walled-off necrotic collections in the paracolic gutter often remains challenging. EndoRotor (Interscope Medical, Inc., Worcester, Massachusetts, USA) is a novel device for effective necrosectomy [2–4]. This is the first published case using it in a percutaneous setting.

We report the case of a 34-year-old man transferred to our hospital intensive care unit (ICU) following severe necrotizing pancreatitis. Complications such as sepsis, acute kidney failure requiring dialysis, and abdominal compartment resulted in a prolonged stay at our ICU.

Large, infected, walled-off necrotic collections remained in the left and right retroperitoneum. Owing to their location, the collections were not suitable for transgastric interventions and therefore percutaneous drainage was used as a primary therapy (► Fig. 1).

At 3 months of percutaneous drainage and intravenous antibiotic therapy without resolution of the necrotic tissue in the left retroperitoneum, percutaneous endoscopic necrosectomy was performed twice using the novel EndoRotor resection device (► Video 1). Percutaneous dilation was performed from 14 to 18 mm to allow insertion of the flexible endoscope into the retroperitoneal cavity. Necrosectomy was then carried out with the flexible EndoRotor device by using high suction (750 mmHg) and low cutting speed (1000 rpm).

Except for the persistence of a cutaneous fistula for less than a week after intervention, no adverse events were observed. The patient's condition improved, and he was discharged 7 days after the initial necrosectomy.

Endoscopy_UCTN_Code_TTT_1AO_2AN



► **Video 1** Percutaneous dilation and subsequent endoscopic necrosectomy was performed using the EndoRotor device (Interscope Medical, Inc., Worcester, Massachusetts, USA).



► **Fig. 1** Computed tomography showed necrotic collections in the left and right lower retroperitoneal area. The percutaneous drainage tube can be seen on the right side of the patient.

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Competing interests

The authors declare that they have no conflict of interest.

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Endoscopy 2022; 54: E362–E363
DOI 10.1055/a-1540-6191
ISSN 0013-726X
published online 9.8.2021
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Georg Thieme Verlag KG, Rüdigerstraße 14,
70469 Stuttgart, Germany

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