Percutaneous endoscopic necrosectomy

A 32-year-old man presented to our institution with abdominal pain, anorexia, fevers, and leukocytosis from a large walled-off necrosis. Prior to this presentation he had been admitted to a local hospital 6 weeks previously with acute severe alcohol-related pancreatitis, which entailed a prolonged stay in the intensive care unit due to multiorgan failure. He was found to have an abdominal fluid collection during this admission for which a percutaneous drain had been placed.

An endoscopic cystogastrostomy was performed using a lumen-apposing covered metal stent, with subsequent endoscopic necrosectomies. However, he continued to have persistent systemic inflammatory signs from a large persistent collection in the right upper quadrant of the abdomen with inflammatory stranding. A previously placed percutaneous drain proved to be insufficient for what was mostly solid necrosis. A multidisciplinary decision to perform a percutaneous endoscopic necrosectomy was made. A 10cm×18mm fully covered metal stent was placed in the track of the percutaneous catheter under fluoroscopic guidance to dilate the track. This was followed, the next day, by a single-session debridement of the cavity which subsequently resulted in significant clinical improvement and the patient's eventual discharge from the hospital. Complete healing of the fistula track and removal of all external drains was achieved in 4 weeks. The lumen-apposing stent was successfully removed 2 months after placement.

Necrotizing pancreatitis and infected necrotic tissue is associated with a high rate of morbidity and mortality. While about

a third of patients with infected necrosis may respond to percutaneous catheter drainage, the majority tend to require debridement [1]. This has led to the evolution from a morbid open surgical debridement to minimally invasive techniques including the percutaneous flexible endoscopic approach. Two small series have shown this technique to be effective [2,3]. Complications included a case of pancreaticocutaneous fistula in each series and self-limited bleeding in one series. Percutaneous endoscopic necrosectomy is an effective adjunct to the management of necrotic pancreatic collections and may especially be considered when percutaneous access has already been achieved by means of a traditional drain.

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Competing interests

D. L. Carr-Locke: Consultant for Boston Scientific and Olympus America.

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