

Replacement of the same lumen-apposing metallic stent for multiple necrosectomy sessions

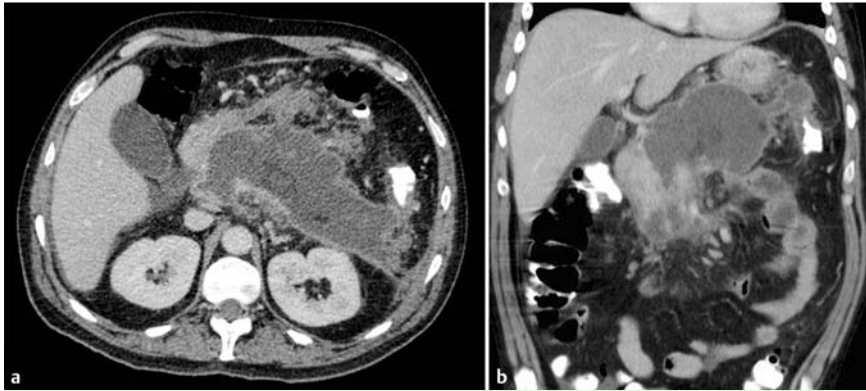


Fig. 1 Computed tomographic scans showing walled-off pancreatic necrosis in a 45-year-old patient 4 weeks after acute pancreatitis. **a** Axial view. **b** Coronal view.

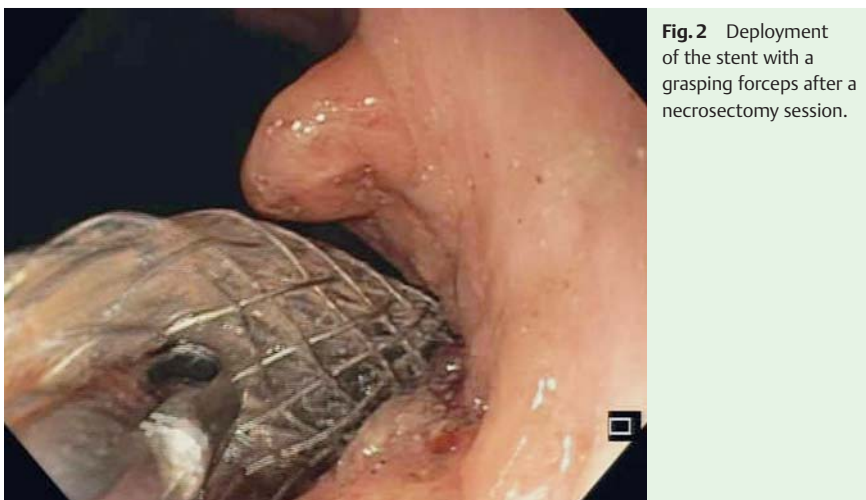


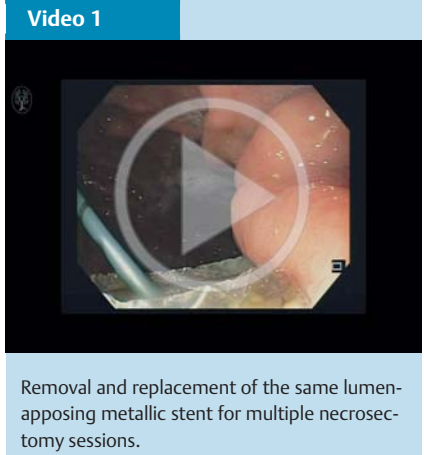
Fig. 2 Deployment of the stent with a grasping forceps after a necrosectomy session.

Necrosectomy through a metal stent is feasible [1] but can be hindered by the limited mobility of the scope tip, and accidental removal of the stent during the extraction or fragmentation of necrotic material is not uncommon [2–4]. We describe a technique for removing and replacing the same lumen-apposing stent before and after each session of necrosectomy.

A 45-year-old patient with severe alcoholic acute pancreatitis required readmission for fever and leukocytosis. Urgent computed tomography revealed walled-off pancreatic necrosis (Fig. 1). Endoscopic ultrasound-guided transgastric

drainage was carried out with the Hot Axios system (Xlumena, Mountain View, California, USA) and a 15×10-mm stent. Eight endoscopic necrosectomy sessions were needed.

Because of the density of the necrotic material, the first three sessions consisted of intense lavage and small fragmentation. During the following two sessions, fragmentation and extraction of the necrotic material were more effective, but the stent was accidentally removed. We replaced the same stent at the end of the procedures (Fig. 2, Video 1). During the remaining three sessions, the stent was intentionally retrieved at the begin-



Removal and replacement of the same lumen-apposing metallic stent for multiple necrosectomy sessions.

ning of each procedure and then put back. Computed tomography 2.5 months after the last session showed complete resolution of the necrosis, and the stent was retrieved.

Stent removal before a necrosectomy session may be justified in specific cases for several reasons. The first is to improve maneuverability inside the collection, which is often limited by the stent. The second is to avoid accidental removal of the stent, which can degrade the stent covering. Intentional removal of the stent may prevent such degradation. A third reason is the need to extract a larger amount of necrotic material; the amount extracted is limited by the inner diameter of the stent.

A possible concern about this procedure is the possibility of damaging the working channel of the endoscope. However, this stent can be inserted smoothly and easily inside the distal tip of a gastroscope. For a smaller channel, lubrication with silicone or oil may be adequate.

Replacing the same Axios stent for multiple necrosectomy sessions appears to be safe and effective. Intentional removal of the stent should be considered when a large necrosectomy is done.

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