Endoscopic vacuum-assisted therapy of infected pancreatic pseudocyst using a coated sponge

Endoscopic vacuum-assisted therapy (EVAT) is a reliable treatment for endoscopically accessible abscesses and was recently described in the management of infected pancreatic pseudocyst (IPC) [1 – 4].

EVAT when performed in the region of the celiac trunk und portal venous system has, in theory, a higher risk of bleeding than when performed in other regions of the body. We treated a woman who had sepsis due to an IPC, chronic pancreatitis, and pronounced gastric varices by EVAT, but with a coated sponge.

The treatment was generally performed as previously described [4]. After 1 week of endoscopic therapy the cyst was free of necrosis and we started EVAT. We adjusted the size of the sponge according to the local topography and wrapped the Endo-SPONGE (B. Braun, Melsungen, Germany) in one layer of Suprasorb CNP Drainage Film (Lohmann & Rauscher, Vienna, Austria), a double-layered film for vacuum therapy of wounds (> Fig. 1 and • Fig. 2) [5]. This set is not commercially available. Secretions were continuously evacuated with a suction of 120 mm Hg (16kPa). We replaced the coated Endo-SPONGE system on the third day and finished EVAT on the seventh day.

The extraction of the wrapped Endo-SPONGE-system was, compared with the extraction of a pure sponge, easier, with less pulling force (**Fig. 3**). The transgastric access into the cyst was also smoother and less bloody (**Fig. 4**). On the seventh day of EVAT the pseudocyst was resolved. Finally we closed the gastrocystic fistula with metallic clips and one Endoloop (Olympus, Tokyo, Japan) (**Fig. 5**).

No complications occurred during therapy and within 6 months after therapy. The treatment of IPC was completed during a single hospital stay.

In our opinion the coated sponge is an improvement in EVAT of infected pancreatic pseudocyst, because it simplifies the extraction of the Endo-SPONGE system and reduces the bleeding risk.

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Competing interests: None



Fig. 1 a Endo-SPONGE adjusted to a size of 35 mm in length and 14 mm in diameter. Beneath the Endo-SPONGE lies Suprasorb CNP Drainage Film. b Suprasorb Drainage Film wrapped around the Endo-SPONGE and fixed by sutures. A guide wire is inside the suction tube.



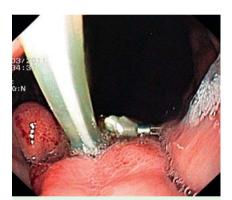


Fig. 2 Endoscopic image of the coated Endo-SPONGE localized in the gastrocystic fistula.



Fig. 3 Image of the extracted Endo-SPONGE wrapped in one layer of Suprasorb CNP Drainage Film.

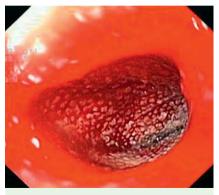


Fig. 4 Endoscopic view of the gastrocystic fistula on the seventh day of EVAT with coated sponge.

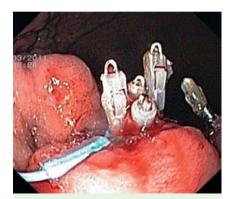


Fig. 5 Endoscopic view of the gastrocystic fistula closed by metallic clips and one Endoloop on the seventh day of EVAT.

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