

## Endoscopic ultrasound-guided transluminal drainage for aseptic splenic abscess

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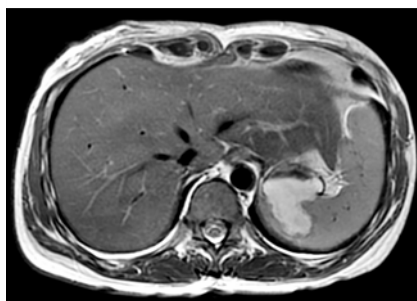
Aseptic abscesses are rare, culture-negative abscesses associated with inflammatory bowel disease which arise most commonly in solid abdominal organs including the spleen, liver, and lymph nodes [1, 2]. Bacterial and aseptic splenic abscesses may not be treatable with antibiotics and corticosteroids alone and require drainage or splenectomy. We report successful endoscopic ultrasound-guided transmural drainage (EUS-TD) of an aseptic splenic abscess.

Our colleagues reported the case of a 41-year-old woman with ulcerative colitis complicated by pyoderma gangrenosum, multiple renal abscesses treated by percutaneous drainage, and a splenic abscess [3]. The splenic abscess measured 4×4×4 cm on imaging studies (**► Fig. 1**). Because the splenic abscess was refractory to medications and could not be approached percutaneously, EUS-TD was performed (**► Video 1**).

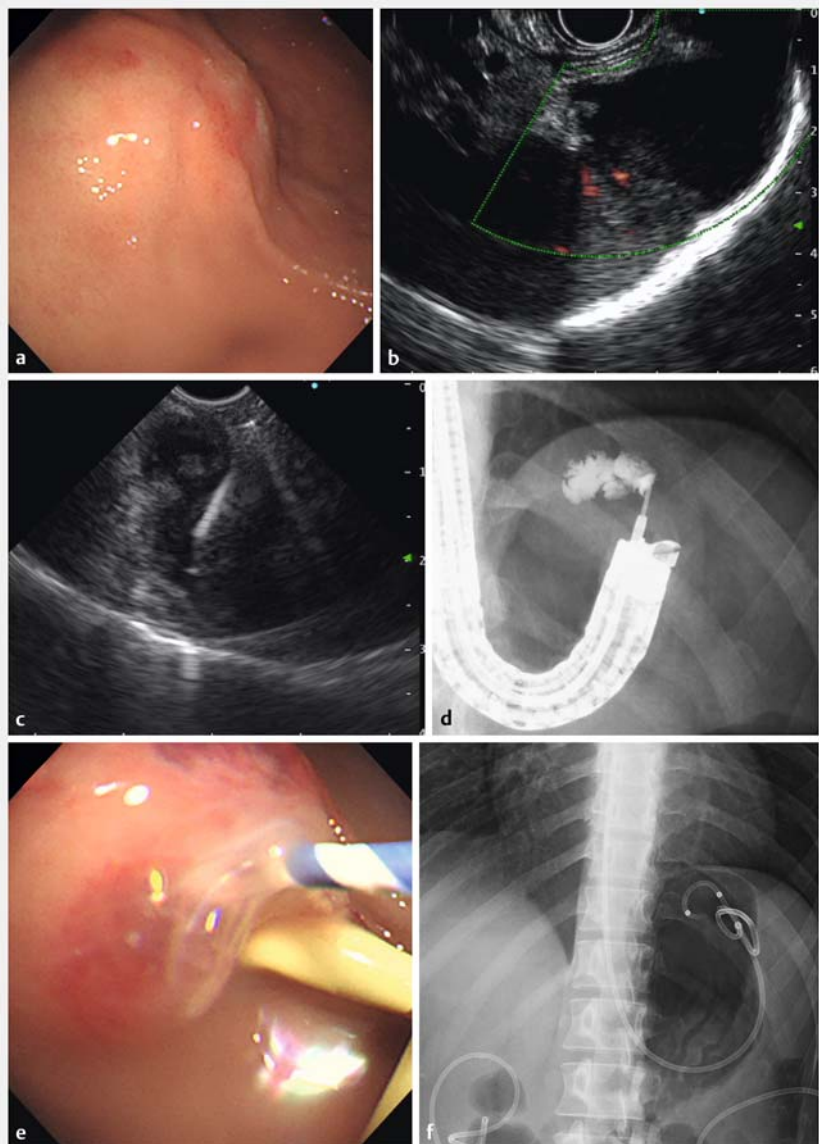
A forward-viewing endosonoscope (TGF-UC260J, Olympus Corp., Tokyo, Japan) was used to puncture the gastric fundus with a 19-gauge needle (EZ Shot 3 Plus, Olympus) under endosonographic and fluoroscopic guidance (**► Fig. 2a–d**). A guidewire was advanced into the abscess and the puncture site was dilated with a biliary balloon dilator. An Uneven Double Lumen Cannula (Piolax Medical Devices, Kanagawa, Japan) was used to introduce

a second guidewire. A 4-cm, 7 Fr pigtail stent was placed over the first guidewire, while a naso-abscess drainage tube was inserted over the second guidewire

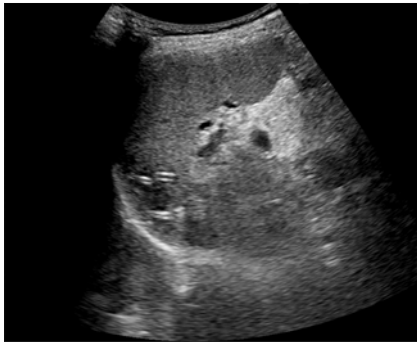
(**► Fig. 2e, f**). Follow-up abdominal ultrasound showed a shrunken abscess (**► Fig. 3**). The naso-abscess tube was removed after cultures of the aspirate were



**► Fig. 1** T2-weighted magnetic resonance imaging revealed a hyperintense 4×4×4-cm abscess in the spleen, adjacent to the gastric fundus.



**► Fig. 2** Endoscopic ultrasound (EUS)-guided transluminal drainage. **a** A bulge in the gastric fundus was confirmed with white light imaging with the forward-viewing endosonoscope in retroflexed position. **b** EUS revealed an anechoic abscess in the spleen. **c** Puncture with a 19-gauge needle. **d** Fluoroscopy confirmed contrast confined to a cystic structure. **e** A pigtail stent was placed over the first guidewire after dilation of the puncture site with a biliary balloon dilator. **f** A naso-abscess drainage tube was placed over the second guidewire.



► **Fig. 3** Follow-up abdominal ultrasound confirmed that the plastic stent was inside the splenic abscess with no fluid components remaining.

confirmed to be negative. No recurrence was observed during 12 months of follow-up.

There have recently been several reports of successful EUS-TD for subphrenic abscesses, including one report of EUS-TD for a splenic abscess that arose as a complication of acute pancreatitis [4,5]. EUS-TD may be an attractive option for splenic abscesses because they are often difficult to access percutaneously and are frequently refractory to medical treatment alone.

### Competing interests

The authors declare that they have no conflict of interest.

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### VIDEO

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► **Video 1** Endoscopic ultrasound-guided transluminal drainage for aseptic splenic abscess using a forward-viewing endosonoscope.

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