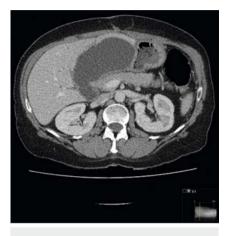
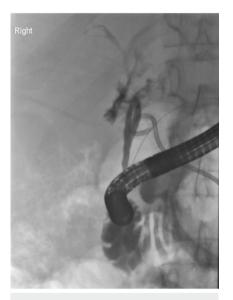
# Intracavity rendezvous procedure



► Fig. 1 Abdominal computed tomography demonstrates the intra-abdominal collection.



► Fig.3 Percutaneous transhepatic cholangiography shows contrast leakage at the biliary anastomosis with no delineation of the recipient duct.



► Fig. 2 Endoscopic retrograde cholangiopancreatography shows contrast leakage at the biliary anastomosis.

Biliary complications are common after liver transplantation, and the vast majority of these can be managed endoscopically [1,2]. We describe a case of a spontaneous bile leak after liver transplantation which eventually required an extraductal rendezvous to re-establish recipient and donor bile duct continuity.



► Fig.4 Guidewire passed successfully across the anastomosis.

A 47-year-woman underwent liver transplantation (donation after brain death, duct-to-duct anastomosis) for end-stage liver cirrhosis. Two weeks after transplantation she was diagnosed with a bile leak (**> Fig. 1**). The patient initially had two endoscopic retrograde cholangiopancreatograms performed and both demonstrated a bile leak at the level of the biliary anastomosis. On both occasions it proved impossible to pass a guidewire into the donor duct (**> Fig. 2**). A percutaneous transhepatic cholangio-



► Fig. 5 Fully covered self-expanding metal stent deployed across the anastomosis and contrast passed through the stent into the small bowel with no leakage.

gram was performed, but the recipient duct could not be accessed (> Fig. 3). A rendezvous procedure was undertaken. Endoscopically, a guidewire (450 cm, 0.018 inch; Terumo, Tokyo, Japan) was passed into the biloma. The guidewire was then snared with an Amplatz Goose Neck loop snare (6 Fr, 15 mm; ev3 Inc. Plymouth, Maine, USA) to establish access across the leak (► Fig. 4; ► Video 1). The Terumo wire was then exchanged for a VisiGlide wire (450 cm, 0.025 inch; Olympus, USA). The donor:recipient duct anastomotic site was dilated with a dilatation balloon (6mm, 4cm; Hurricane RX, Boston Scientific, USA) before a fully covered self-expanding metal stent (8 mm, 4 cm; Kaffes stent, Taewoong Medical, Japan) was inserted over the guidewire across the anastomosis. Further contrast injection through the percutaneous route did not demonstrate a bile leak (> Fig. 5). The patient was discharged home 2 days later without any complications.



**Video 1** Rendezvous procedure in the biloma to re-establish donor:recipient duct continuity following spontaneous bile leak after liver transplantation.

An intracavity rendezvous procedure is a viable management solution in cases where endoscopic retrograde cholangiopancreatography and the percutaneous transhepatic approach have failed to resolve a bile leak after liver transplantation. A novel fully covered self-expanding metal stent (Kaffes stent) can be used to bridge the anastomotic area between the donor and the recipient duct.

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### **Competing interests**

The authors declare that they have no conflict of interest.

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# Bibliography

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