## Two-step endoscopic radiofrequency ablation for metastatic cholangiocarcinoma

A 58-year-old woman with cholangiocarcinoma previously treated with partial hepatectomy with Roux-en-Y gastric bypass, presented with worsening jaundice. Despite chemotherapy, the patient was diagnosed with tumor obstructing the hepaticojejunostomy and associated intrahepatic biliary ductal dilation. She was referred for endoscopic retrograde cholangiopancreatography (ERCP) with intraductal radiofrequency ablation (RFA). However, conventional ERCP failed because of her altered anatomy. She was offered two-step RFA therapy (► Video 1). During the first step, the patient underwent a successful endoscopic ultrasound-quided hepaticogastrostomy with placement of a 10 mm fully covered selfexpanding metal stent, bridged with a 7Fr×15cm plastic double-piqtail stent. One month after biliary decompression and maturation of the hepaticogastrostomy, the patient underwent RFA of the malignant stricture and placement of a 7 Fr × 15 cm plastic double-pigtail stent in antegrade fashion, across the stricture ( Fig. 1).

Unresectable cholangiocarcinoma is a challenging disease, for which chemotherapy and radiotherapy are not typically able to provide significant survival benefits [1]. Local ablative therapies, particularly RFA, have been shown to improve symptoms in malignant biliary strictures [2, 3]. In addition, there is some suggestion that RFA may be associated with improved survival [4]. RFA requires biliary access to determine the location of the stricture. Then the radiofrequency energy can be directly applied at the stricture site. However, when access to the biliary stricture is not feasible during conventional ERCP, a successful two-step RFA via a hepaticogastrostomy can be offered successfully, as illustrated by this case.

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▶ Fig. 1 Fluoroscopy image of a transhepatic fully covered metal stent placed with a double-pigtail stent to create access for future radiofrequency ablation.

## Competing interests

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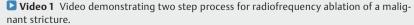
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### References

- [1] Alvarez-Sanchez MV, Napoleon B. Review of endoscopic radiofrequency in biliopancreatic tumours with emphasis on clinical benefits, controversies and safety. World J Gastroenterol 2016; 22: 8257 – 8270
- [2] Figueroa-Barojas P, Bakhru MR, Habib NA et al. Safety and efficacy of radiofrequency ablation in the management of unresectable bile duct and pancreatic cancer: a novel palliation technique. J Oncol 2013; 2013: 910897
- [3] Dolak W, Schreiber F, Schwaighofer H et al. Endoscopic radiofrequency ablation for malignant biliary obstruction: a nationwide

- retrospective study of 84 consecutive applications. Surg Endosc 2014; 28: 854 860
- [4] Sharaiha RZ, Sethi A, Weaver KR et al. Impact of radiofrequency ablation on malignant biliary strictures: results of a collaborative registry. Dig Dis Sci 2015; 60: 2164 2169

### Bibliography

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