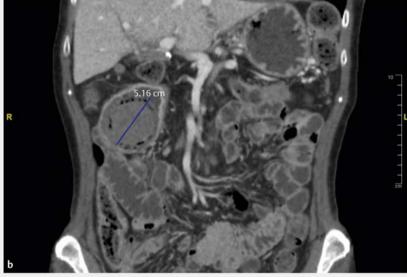
Endoscopic destruction of a large intrajejunal biliary stone using a polypectomy snare and high Autocut mode





► Fig. 1 Abdominal computed tomography scan showing the large endoluminal stone: a in transverse section; b in coronal section.

Biliary stones are usually found in the gallbladder or in the biliary ducts and are sometimes challenging to destroy with mechanical, electrohydraulic, or laser lithotripsy [1,2]. Gallstone collections in the jejunal limb after duodeno-

pancreatectomy have rarely been reported in the literature [3,4].

We report here the case of a 66-year-old patient with an endocrine tumor that had been previously resected by pancreatoduodenectomy (Imanaga's procedure) in 1998. In 2014, she was referred



► Fig. 2 Biliary magnetic resonance imaging scan 8 months after the procedure showing normal caliber bile ducts.

for cholangitis and percutaneous radiologic drainage was performed. Biliary stones were removed and an annual drainage was performed to gauge the biliojejunal anastomosis. In 2017, she had several further episodes of cholangitis, with acute pain in the hepatic region and fever. An abdominal computed tomography (CT) scan revealed a 5-cm radiopaque stone in the afferent jejunal loop (**Fig. 1**), which was causing bile duct dilatation.

On endoscopy, the gastrojejunal anastomosis was found to be stenosed. We performed endoscopic balloon dilation up to 12 mm in order to reach the afferent loop, which had the giant intraluminal stone within it. After failure of several endoscopic techniques, including argon plasma coaquiation and electromechanical lithotripsy, we decided to use the tip of a 10-mm polypectomy snare (Olympus, Tokyo, Japan) and Autocut mode, at 180W (ERBE VIO 300, Tübingen, Germany) in order to fragment the stone (Video 1). This allowed 80% destruction of the stone and a second session was performed 1 month later.





▶ Video 1 Endoscopic destruction of a large intrajejunal stone using the tip of a polypectomy snare, a procedure repeated after 1 month, resulting in normal caliber bile ducts on follow-up 8 months later.

The patient had an immediate clinical response following the first procedure. After 8 months of follow-up, no further episodes of cholangitis have been reported and biliary magnetic resonance imaging (MRI) shows normal caliber bile ducts (**Fig. 2**).

In conclusion, we report a rare complication after an Imanaga's reconstruction procedure that was treated endoscopically. Our case was particularly difficult because of the giant size of the intrajejunal stone (5 cm). Large stone destruction can be possible using the tip of a snare with a high Autocut mode (180 W), in order to avoid a difficult surgical approach.

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Competing interests

None

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