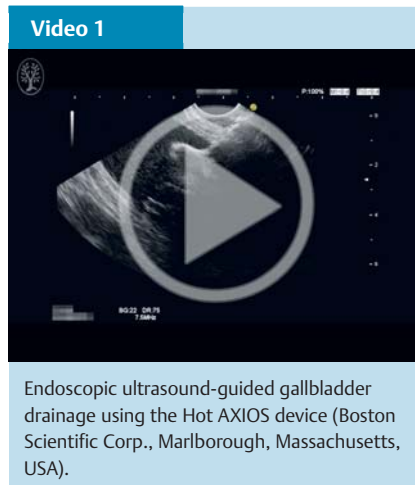


Endoscopic cholecystogastrostomy in a patient with gallbladder empyema secondary to cholangiocarcinoma

Endoscopic ultrasound (EUS)-guided gallbladder drainage (EUS-GBD) is reported to have comparable efficacy to percutaneous drainage [1]. However, the technique has not been widely adopted owing to lack of specific devices and concerns about leakage and stent migration. Lumen-apposing metal stents have been developed to minimize the risks and simplify the procedure [2]. A novel device has recently become available (Hot AXIOS; Boston Scientific Corp., Marlborough, Massachusetts, USA), and consists of a stent (stent diameter 15 mm, stent length 10 mm, flange diameter 24 mm) and electrocautery-enhanced delivery system, enabling a single device to be used when previously multiple devices and steps were required. To date, only a single case report of its use for EUS-GBD has been published [3]. We report on the use of this device for EUS-GBD in a 68-year-old woman with obstructive jaundice due to inoperable hilar cholangiocarcinoma.

A percutaneous transhepatic cholangiography procedure was performed, and an internal-external drain was placed. Shortly after this procedure the patient developed clinical features of cholecystitis. A computed tomography (CT) scan showed gross distension of the gallbladder and the presence of a gallbladder stone. There was also extensive pericholecystic fluid. Following a multidisciplinary team discussion, a decision was made to perform EUS-GBD using the Hot AXIOS. The procedure was undertaken under conscious sedation, using a therapeutic echoendoscope. The gallbladder was punctured from the antrum using the



Hot AXIOS device and a cutting current was applied. Radiography was used, but deployment of the stent was entirely under EUS control (▶ **Video 1**). The stent was dilated using a 10-mm balloon. The procedure was well tolerated and completed within 15 minutes. EUS and fluoroscopy confirmed that the stent was in a good position. A large amount of pus drained immediately.

There was a rapid improvement in the patient's clinical condition over the next few days. Biliary drainage was internalized with the placement of two metal stents. CT scans at 8 days and 7 weeks post placement showed that the stent remained in the correct position and confirmed resolution of cholecystitis.

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Competing interests: None

Bharat Paranandi¹, Manu Nayar¹, John Scott², Richard Charnley³, Colin Wilson³, Kofi Oppong¹

¹ Department of Gastroenterology and HPB unit, Freeman Hospital, Newcastle upon Tyne, United Kingdom

² Department of Radiology, Freeman Hospital, Newcastle upon Tyne, United Kingdom

³ Department of Surgery and HPB unit, Freeman Hospital, Newcastle upon Tyne, United Kingdom

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Corresponding author

Kofi Oppong, MD
 Hepato-Pancreato-Biliary Unit
 Freeman Hospital
 Freeman Road
 Newcastle upon Tyne NE7 7DN
 United Kingdom
 Fax: +44-191-2231249
 Kofi.Oppong@nuth.nhs.uk