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# Utilisation of cholecystostomy and cystic duct as a route for percutaneous cutting balloon papillotomy and expulsion of common bile duct stones

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### **DESCRIPTION**

A 78-year-old male presented with jaundice, fever, rigors and right upper quadrant pain. Ultrasound demonstrated gallbladder empyema and common bile duct (CBD) stones with mild CBD dilatation. Medical morbidity and prior partial gastrectomy precluded endoscopic treatment. Under ultrasound guidance an 8fr Navarre pigtail drain (Bard Limited, UK) was inserted into the gall bladder and left insitu for 4 weeks. After 4 weeks, an 8fr Brite tip vascular

sheath (Cordis-Europa, Netherlands) was introduced over a guidewire into the gallbladder via the cholecystostomy tract. A 5fr hydrophilic catheter (Cobra C2) and 0.035 guidewire (Terumo, Belgium) was used to traverse the cystic duct and CBD into the duodenum (figure 1A,B). The 0.035 wire was exchanged for a 0.018 VI8 Control Wire (Boston-Scientific, Natick, Massachusetts, USA) and an 8 mm peripheral cutting balloon was used to perform the papillotomy (figure 1C). Following papillotomy an 8 mm

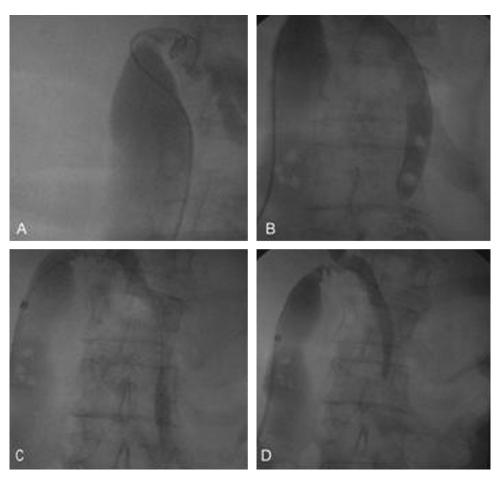


Figure 1 (A) Terumo Guide-wire and catheter traversing cystic duct. (B) Demonstrating gallbladder and common bile duct (CBD) stones with guidewire in CBD. (C) Demonstrating 8 mm cutting balloon inflated across the papilla. (D) Image postexpulsion of CBD stones.

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standard Wanda angioplasty balloon (Boston Scientific, Galway, Ireland) was used to push the 2 CBD stones into the duodenum (figure 1D). Subsequently, grasping forceps was used to retrieve the gallbladder stones via the cholecystostomy and drainage catheter was left insitu for 1 week. Postoperative recovery was uneventful. This is the first case describing cutting balloon papillotomy and expulsion of stones via cholecystostomy and cystic duct. The percutaneous transhepatic approach has previously been described. We report a safe alternative strategy to the transhepatic approach when endoscopic treatment is not feasible. This technique involves drainage of empyema to alleviate immediate danger and to provide access for subsequent

papillotomy, CBD stone expulsion and gallbladder calculi retrieval.

Competing interests None.

Patient consent Obtained.

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