Methods  We retrospectively analysed 895 consecutive ERCPs from our endoscopy reporting database for use of precut sphincterotomy, biliary access rate, repeat ERCP rate and complications.

Results  In 87 patients (9.7%) a precut sphincterotomy was performed to facilitate biliary cannulation. In 31 of these patients (35.6%) biliary cannulation was achieved directly during the first ERCP. We repeated the ERCP in 46 of the 56 patients with failed precut sphincterotomy after a median of 4 days following the initial precut sphincterotomy allowing successful biliary cannulation in 34/46 patients (73.9%). The overall cannulation success rate was 65/87 (74.7%) or 65/77 (84.4%) excluding the 10 patients who did not undergo a second ERCP. Complications observed after precut sphincterotomy were pancreatitis (12.7%), retroperitoneal perforation (2.3%) and bleeding (1.1%).

Conclusion  The high success rate of biliary cannulation at a second attempt justifies repeating the ERCP after unsuccessful immediate cannulation following precut sphincterotomy before more invasive approaches such as percutaneous cholangiography or surgery are considered.

Competing interests  None.

Keywords  bile duct, cannulation technique, ERCP, post ERCP pancreatitis, sphincterotomy.

Introduction  Precut sphincterotomy facilitates selective bile duct access during endoscopic retrograde cholangiopancreaticography (ERCP) in patients in whom conventional cannulation has failed. However, it is associated with a higher complication rate and does not always facilitate successful initial cannulation. If biliary cannulation is not successful immediately after precut many endoscopists repeat the ERCP after an interval to allow papillary oedema to improve. The safety and efficacy of this practice is not well reported. We investigated the biliary cannulation success and complication rates of initial and repeat ERCPs requiring precut sphincterotomy for biliary cannulation.