Interventional EUS of Pancreatobiliary Diseases

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Even in experienced hands, 10% of cases fail ERCP due to technical or anatomical problems. With the evolution of linear EUS and ability to direct a needle within the interventional field, the therapeutic potential of EUS has expanded greatly. The biliary and pancreatic systems are in close proximity to the stomach and the duodenum, which allows EUS access in cases not accessible by ERCP. For EUS-guided biliary drainage (EUS-BD), there are two routes. One is transduodenal, the other is transgastric. Stent placement can be performed in a rendezvous or antegrade fashion. Published data have shown a high success rate and a low nonfatal complication rate. For peripancreatic fluid collection (PFC), EUS improves both the technical success rates (>90%) and safety profile (complications <5%) of the procedure. In two randomized trials, success rates were significantly higher than that of blind drainage. Complication rates were similar or less than that of blind drainage. EUS-guided pancreatic duct drainage is an attractive alternative to decompress the obstructed pancreatic ductal system. The routes were similar to biliary drainage: transduodenal and transgastric. Stent placement has been described the rendezvous technique and pancreatogastrostomy. Complication rates were similar between 5% and 44% and are independent of the technique adopted for drainage. EUS-guided gallbladder drainage has been rapidly gaining acceptance as an effective method for acute cholecystitis unsuitable for cholecystectomy. Plastic stent and metal has been used as a drainage conduit. The clinical efficacy and complication rates were similar to that of PTGBD. In conclusion, the EUS makes it an attractive therapeutic modality for management of various pancreatobiliary diseases that are not amenable to ERCP.