Management of malignant distal biliary obstruction in the UK

Introduction

Endoscopic retrograde cholangiopancreatography (ERCP) is the standard of care to treat malignant distal biliary obstruction (MDBO) due to cancers of the pancreas, bile duct and ampulla. ERCP can fail in patients with duodenal stenosis, ampullary infiltration or tight biliary strictures. Furthermore, biliary brushings have a sensitivity of only 30-50%. Endoscopic Ultrasound Choledochoduodenostomy (EUS-CDD) offers a viable alternative for biliary decompression in this patient group, usually after a failed ERCP. Same-session EUS fine needle biopsy (FNB) increases sensitivity to 90-95%, and this technique can be combined with ERCP or EUS-CDD.

Aim

To assess the current clinical practice across hepaticopancreatobiliary (HPB) centres in the UK for the management of MDBO.

Methods

A prospective multicentre snapshot of practice for the management of MDBO was performed. HPB centres recorded the details of endoscopic procedures to treat first presentation MDBO from the 1st to 31st October 2024. Data collected included initial and subsequent modalities for biliary drainage, details of tissue acquisition, disease stage and sedation used.

Results

Eleven HPB centres participated with a total of 80 patients with MDBO due to pancreatic adenocarcinoma (71%), distal cholangiocarcinoma (15%) and ampullary lesions (8%). Disease stage was classified as operable (23%), borderline operable (11%), locally advanced (35%) or metastatic (28%). Initial attempted drainage procedures included ERCP + stent (85%), EUS-CDD (11%), PTC (3%) and EUS-HGS (1%). Duodenal obstruction was present in 7 patients (9%), for whom EUS-CDD was performed in 6/7 patients and EUS-hepaticogastrostomy (HGS) in 1/7. Subsequent procedures to achieve biliary drainage were required in 20 patients who had ERCP (29%), consisting of repeat ERCP + stent (16%), EUS-CDD (60%), EUS-HGS (12%) and PTC (12%). Diagnostic tissue was obtained at the initial drainage attempt in 54 patients (68%), including biliary brushings (37%), fine needle biopsy (FNB) (43%) or both (20%). Subsequent procedures for tissue acquisition were required in 19 patients (24%).

Conclusion

ERCP remains the first-choice endoscopic intervention for MDBO in UK HPB centres. Primary EUS-CDD is not commonly practised. The technical success rate of ERCP was only 71%, requiring alternative methods of biliary drainage, which was predominantly by EUS-CDD in these centres. These data show the number of patients undergoing diagnostic sampling was lower than JAG KPIs, and a significant number of patients required repeat procedures for histology. International large RCTs have shown equivalence between EUS-CDD and ERCP for treatment of MDBO. Given the number of repeat procedures required in this study, primary EUS-CDD with EUS-FNB should be considered as a first line option in this patient group. A prospective RCT is required to determine if this strategy reduces time to active treatment.