

symptomatic relief of obstruction of the biliary tree. Although mortality following ERCP is high in patients with advanced age and a malignant diagnosis, a Cochrane review has shown that endoscopic stents have reduced complications and mortality compared with surgical bypass in inoperable pancreatic cancer. Furthermore metal stents have improved patency in biliary obstruction than plastic stents. Our aim was to evaluate patient outcomes following endoscopic metallic stenting at a specialist tertiary referral centre, including the need for re-intervention and mortality rates.

Methods We performed a retrospective audit and service evaluation for all endoscopic metallic biliary stent procedures at Queen's Medical Centre, Nottingham University Hospitals Trust over a 1-year period during 2010 with patients receiving at least 1-year follow-up. Demographic data, the need for repeat intervention (either endoscopic or radiological), procedure-related complications and mortality were determined.

Results During 2010, 40/776 (5.2%) patients undergoing ERCP had metallic biliary stents inserted; uncovered Zilver® stents (Wilson Cook, USA) n=38 (95%), covered Niti-S® stents (Taewoong Medical, S. Korea) n=2 (5%). Of these 22 (55%) were male and mean (\pm SD) age was 73.1 \pm 12.3 years. Final diagnosis was pancreatic cancer; n=22 (55%), cholangiocarcinomas; n=13 (33%), other malignancy; n=3 (7%) and benign stricture; n=2 (5%). Strictures were located either distally n=25 (63%), mid-duct strictures n=4 (10%) or proximal/hilar strictures n=11 (27%). All patients underwent radiological imaging prior to ERCP. 22 patients (55%) had undergone prior ERCP with the majority, 21/22 (95%) patients, having confirmed cytological diagnosis of malignancy and 20/22 (91%) patients having previous biliary stents in situ. These were predominantly plastic stents which had blocked or required stent exchange. All cause 1-year mortality was 80%, with median (range) survival 120 (6–361) days. 7-day and 30-day mortality was 5% and 13% respectively. There were no immediate reported complications at time of endoscopy. 9/40 (22.5%) patients required further ERCP or percutaneous transhepatic cholangiography stenting procedures. All re-interventions were in patients with uncovered stents; 6 due to tumour in growth or stent occlusion and one due to stent misplacement.

Conclusion Although technical success and immediate complications were satisfactory, need for re-intervention was required in 22.5%. Median survival and stent patency in this study is comparable to data from the Cochrane review, however further work is required to compare different metallic stent construction or other manoeuvres to reduce the need for re-intervention.

Competing interests None declared.

PTU-237 COMPLICATIONS AND OUTCOMES FOLLOWING PERCUTANEOUS ENDOSCOPIC GASTROSTOMY (PEG) TUBE INSERTION: A SINGLE CENTRE EXPERIENCE

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Introduction PEG insertion has a reported 30-day mortality of 19%–24%^{1,2} suggesting a significant number of inappropriate insertions that were unnecessary for good care. Despite this there are no consistent Australian guidelines regarding patient selection for this procedure. To try and identify patients who would not benefit from PEG insertion we conducted an audit of all PEG insertions undertaken at our hospital, with particular reference to indications, complications and outcome.

Methods PEG insertions from 15 January 2009 to 22 July 2011 were identified from an endoscopy database and then medical notes were reviewed. We assessed indication for PEG insertion, the use of

prophylactic antibiotics, complications during the procedure, 30 day complications and longer term complication rates.

Results 28 patients were identified (13 male and 15 female). The mean age was 71.8 years. The most common indication for PEG insertion was dysphagia following a cerebrovascular accident (CVA) (65%). Other indications included head and neck tumours (14%), other neurological disorders and poor oral intake due to severe depression (21%). 64% of patients received prophylactic antibiotics during the procedure with cephazolin compared to the recommended 100%. Despite this low rate, no patients were re-admitted with PEG site infections. 30-day mortality was 23%. In patients with CVAs 30-day mortality was 45% vs 0% in patients with other indications (p=0.038; Fishers exact test). Eleven patients had episodes of aspiration within 30 days of PEG insertion—the majority of these were from the CVA group (72%). The median time between CVA and PEG insertion was 25.5 days (range 10–53 days). Overall survival at 1 year was 38%. There were three cases in which the PEG fell out: two of the three were due to the patient removing it.

Conclusion Our data shows a significantly higher 30-day mortality in CVA patients as well as a higher frequency of aspiration in this group. This is in keeping with other studies³ and re-iterates the fact that insertion of a PEG does not prevent the development of aspiration pneumonia, which is a common misconception. It would therefore be reasonable to suggest a minimum period of 30 days of observation plus NG feeding in such patients to allow for any change in clinical condition.

Competing interests None declared.

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PTU-238 PREP, NO PREP OR MORE PREP? A PROSPECTIVE RANDOMISED STUDY COMPARING TWO BOWEL PREPARATION REGIMES WITH NO PREPARATION ON QUALITY OF CAPSULE ENDOSCOPY

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Introduction Capsule endoscopy (CE) is a widely used method for evaluation of the small bowel. However it does have limitations; visualisation of the small bowel mucosa is often impaired due to the presence of food residue, air bubbles and bile pigments.¹ The effect of bowel preparation on improving visualisation of the small bowel varies² and is inconvenient for patients.³ We aimed to prospectively evaluate the effects of two different bowel preparations on visualisation of the small bowel and on overall diagnostic yield compared with standard dietary changes.

Methods 51 patients (26 male/25 female; mean age 60.7 years) were randomised into three groups using the sealed envelope technique. Indications for CE were iron deficiency anaemia, obscure GI bleeding (occult and overt) and anaemia. Group 1 (n=19): Clear fluid day before procedure. Overnight fast. Group 2 (n=12): Clear fluid day before procedure. 2L PEG in afternoon of day prior to procedure. Overnight fast. Group 3 (n=20): Clear fluid day before procedure. 1L PEG and 1 sachet Picoprep in afternoon of day prior to procedure. Overnight fast. CE were viewed by a single blinded examiner and