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 (±SD) age was 73.1±12.3 years. Final diagnosis was pancreatic cancer; n = 22 (55%), cholangiocarcinomas; n = 15 (33%), other malignancy; n = 5 (7%) and benign stricture, n = 2 (5%). Strictures were located either distally n = 25 (65%), mid-duct structures n = 4 (10%) or proximal/ hilar structures 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 and mortality were determined.

Conclusion 9/40 (22.5%) patients required further ERCP in 30 days. There were no immediate reported complications. There were 13% reported 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.
adequacy of bowel preparation according to three categories (>80% visualisation, 50%–80% visualisation).

### Results

<table>
<thead>
<tr>
<th></th>
<th>Mean age</th>
<th>Completion rate (%)</th>
<th>Yield (%)</th>
<th>Good SB views (%)</th>
<th>Mean GTT ± SEM (min)</th>
<th>Mean SBTT ± SEM (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gp 1</td>
<td>63.6</td>
<td>79</td>
<td>42.1</td>
<td>100</td>
<td>35.9 ± 11.9</td>
<td>254.8 ± 24.83</td>
</tr>
<tr>
<td>Gp 2</td>
<td>57</td>
<td>83.3</td>
<td>41.6</td>
<td>81.2</td>
<td>87.5 ± 47.79</td>
<td>239.3 ± 45.7</td>
</tr>
<tr>
<td>Gp 3</td>
<td>60</td>
<td>90</td>
<td>35</td>
<td>79</td>
<td>74.8 ± 27.06</td>
<td>211.5 ± 24.14</td>
</tr>
<tr>
<td>p Value</td>
<td>NS</td>
<td>NS</td>
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Conclusion: Our findings are in keeping with a recent meta-analysis which has shown no difference in CE completion rates, GTT and SBTT with purgative preparation. Our study shows a trend towards better caecal completion rates with bowel preparation involving PEG and Picoprep, but these results did not reach statistical significance. Overall diagnostic yield was similar in all three groups. Liquid diet, in combination with fasting, prior to CE is generally better tolerated by patients and our findings would support this as adequate preparation for CE.

Competing interests: None declared.

### REFERENCES


### EUS ASSESSMENT OF LESIONS OF THE AMPULLA OF VATER: OF PARTICULAR VALUE IN LOW GRADE DYSPLASIA

**PTU-239**

K Roberts, N McCulloch,* D Mayer, J Isaac, P Muiesan, S Bramhall, D Mirza, R Sutcliffe, C Forde, R Marudanayagam, B Mahon. Queen Elizabeth Hospital Birmingham, Birmingham, UK

**Introduction** Lesions of the ampulla of Vater are difficult to stage using conventional cross sectional imaging and endoscopy. An accurate diagnosis is essential as this permits endoscopic resection in dysplastic lesions preserving pancreatoduodenectomy for malignant cases. Endoscopic ultrasound has greater sensitivity and specificity than conventional imaging in staging lesions. To date its role in staging dysplastic lesions is unclear.

**Methods** Patients with adenomas or adenocarcinomas of the ampulla were identified from departmental databases over a 5-year period. Methods of presentation, investigation, treatment and outcome were recorded. Patients with no EUS were compared to those with EUS.

### RESULTS

**Of 58 patients, 27 were investigated with an EUS. There was no difference in age, sex or method of presentation between groups. The preoperative diagnosis was correct in 94% of cases in the EUS group vs 61% in the no EUS group (p<0.006). The sensitivity, specificity, positive and negative predictive values in the EUS group to correctly identify malignant lesions was 93, 100, 100 and 93% respectively. For the non-EUS group these values were 77, 91, 93 and 72%. Every diagnosis of low grade dysplasia (LGD) was correct in the EUS group while these accounted for the majority of errors in the no EUS group. High grade dysplasia (HGD) was frequently understated.**

**Conclusion** When added to existing investigations, EUS increases the accuracy of preoperative staging of ampullary lesions being particularly useful in cases of LGD. This permits safer endoscopic management of these cases. Cases of HGD must be reviewed carefully and considered for pancreatoduodenectomy.

**Competing interests** None declared.

### IMPROVING OUTCOMES OF ENDOscopic RETROGRADE CHOLANGIO-PancreATOGRAPHy WITH THE USE OF NEW TECHNIQUES IN A DISTRICT GENERAL HOSPITAL SETTING

**PTU-240**

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**Introduction** Outcomes of endoscopic retrograde cholangio-pancreatography (ERCP) performed at West Hertfordshire Hospital NHS Trust (WHHT) in 2007 and 2011 were compared. The 2011 data followed introduction of the techniques of wire-guided cannulation and balloon sphincteroplasty. Outcomes measured included successful biliary cannulation on first ever ERCP, the use of precut, successful stenting of strictures, stone extraction and post ERCP pancreatitis rates. The number of referrals to a tertiary centre due to failed ERCP in both years was also calculated. The outcomes were compared with national data from the BSG ERCP audit of 2007.

**Methods** Local data were obtained from all ERCP performed at WHHT in the years 2007 and 2011. Success of cannulation, precut use, successful stenting and stone extraction was collected from electronic ERCP reports. Post ERCP pancreatitis rates were obtained by confirming hyperamylasaemia post ERCP of at least three times the upper limit of normal requiring admission to hospital or prolongation of planned admission of ≥2 nights, as per the BSG 2007 Audit definitions. Similar national outcomes were taken from the BSG 2007 Audit.

**Results** Results are summarised below:

A Fisher’s exact test was performed to compare data. A statistically significant difference was found between the 2007 and 2011 groups (p value <0.01) when comparing successful stone extraction. Tertiary centre referrals due to failed ERCP fell from 12 in 2007 to 4 in 2011.

**Conclusion** The introduction of wire-guided cannulation has maintained high success rates of biliary cannulation with a reduction in