**BILIARY ASPIRATES IN SUSPECTED PANCREATIC CANCER. A USEFUL ADJUNCT TO BRUSHINGS AT ERCP?**

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**Introduction** NICE guidelines advocate the use of biliary brushings to obtain a tissue diagnosis in patients suspected of having pancreatic cancer when endoscopic retrograde cholangiopancreatography (ERCP) is used to relieve biliary obstruction. This retrospective audit evaluated whether biliary aspiration in addition to biliary brushings increased diagnostic yields at ERCP at a district general hospital, reducing the need for tertiary referral for endoscopic ultrasound (EUS) and fine needle aspiration (FNA).

**Methods** Retrospective analysis of the local endoscopy database identified all patients undergoing ERCP with biliary brushings and aspirations between July 2012 and December 2018. Histological diagnoses from biliary aspirates/brushings were compared with subsequent FNA, surgical resection or hepatobiliary multi-disciplinary team diagnosis.

**Results** 124 patients underwent ERCP with biliary brushings during the study period. 28 of these patients had biliary aspirations in addition to biliary brushings. Sensitivity for biliary brushings alone was 23.8% (CI 8.2–57.8) (table 1). Specificity was 96% (95% CI 79.7–99.9). In the cohort undergoing biliary brushings and aspirate, specificity for biliary brushings alone was 23.8% (CI 8.2–47.2), whilst combination of brushings and aspirates was 28.6% (95% CI 11.3–52.5).

**Abstract PTH-045 Table 1** Cytological diagnosis (aspirate and brushings) at ERCP compared with final diagnosis

<table>
<thead>
<tr>
<th></th>
<th>Malignancy</th>
<th>Benign</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Malignant Cytology</strong></td>
<td>47</td>
<td>1</td>
<td>48</td>
</tr>
<tr>
<td><strong>Benign Cytology</strong></td>
<td>52</td>
<td>24</td>
<td>76</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>99</td>
<td>25</td>
<td>124</td>
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**Conclusions** Biliary cytology has modest sensitivity with high specificity in the detection of malignancy at ERCP. Biliary aspirate cytology increases the positive yield by 5% compared to brushings alone and is a quick and easy technique at ERCP. Further data is required to evaluate whether biliary aspirates reliably increase the modest yield at ERCP, but this study shows a improvement from 23.8% to 28.6% in the subgroup who underwent both modalities to identify malignant cells at ERCP.

**OUTCOMES OF COLONOSCOPIC SURVEILLANCE AND MOLECULAR PHENOTYPING IN PATIENTS WITH FAMILY HISTORY OF COLORECTAL CANCER**

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**Introduction** Post ERCP pancreatitis (PEP) is a serious complication of ERCP. Procedural risk factors include pancreatic duct injection of contrast and pancreatic guidewire cannulation. Common bile duct (CBD) access can be challenging and pancreatic guidewire assisted cannulation (PGWAC) is an accepted technique to facilitate this. Rectal non-steroidal anti-inflammatory (NSAID) administration is now widely adopted to minimise PEP in all ERCPs, whilst additional pancreatic stenting is recommended in high risk cases.

**Methods** Retrospective data was collected from the local endoscopy database identifying all patients undergoing ERCP within 3 years. Every ERCP report was reviewed; indication, diagnosis, use of rectal NSAID and whether the CBD or pancreatic duct (PD) was cannulated was documented. This data was then cross-referenced with hospital records to identify all patients diagnosed with pancreatitis within one-week of ERCP by reviewing medical records, biochemistry and imaging.

**Results** 813 ERCPs were performed in the study period; 7 were subsequently excluded due to insufficient data. The commonest indication for ERCP was choledocholithiasis (65.9%). CBD cannulation rates were 93.56%. Overall PEP rate was 2.85% (95% CI, 1.82–4.25). The ampulla was not reached in 22 cases and thus excluded (risk of PEP deemed very low).

Of the remaining 784 patients, 107 had inadvertent PD cannulation. When the PD was cannulated, the CBD was successfully cannulated in 96.3% using PGWAC, whereas when the PD was not cannulated, cannulation rate was 92.3%. However in the cohort who had PD cannulation, PEP rates were statistically significantly higher 14.02% compared to those that did not have PD cannulation (1.18%) p<0.05. PEP rates were 12.75% in successful PGWAC, 40% in unsuccessful PGWAC, 1.23% in successful CBD cannulation without PGWAC and 0% in unsuccessful CBD cannulation without PGWAC.

**Conclusions** PGWAC is an accepted technique to facilitate difficult CBD access. In the era of NSAID prophylaxis for all patients the place of pancreatic stents is uncertain. Current practice for stenting the PD after PGWAC is variable. Our data would suggest that PGWAC immediately puts the patient into a high risk group for PEP and pancreatic stenting should be considered. The risk of PEP in patients where CBD cannulation is successful is 12.75% in PGWAC compared with 1.23% where the PD is not cannulated with a wire. The overall low PEP rates in this study could be potentially decreased if pancreatic stenting was employed after PGWAC and should be a further area for studies.

**REFERENCE**