

Abstract PTH-007 Table 1

Success (%)		Eliminate	Eliminate	Eliminate	Eliminate	Eliminate Chronic
Per Procedure	'All comers'	Previous Failure	Billroth I / II / Roux En Y	Duodenal Stricture	CBD Tumour	Pancreatitis
Virgin Papillae	79%	80%	81%	82%	84%	84%
Non-Virgin Papillae	93%	95%	95%	96%	97%	97%
Overall	86%	87%	88%	89%	90%	90%

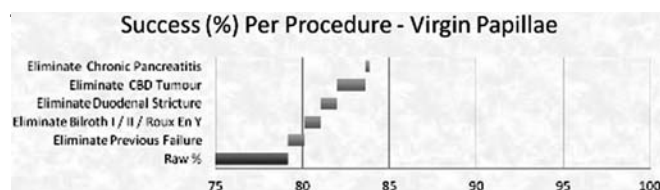
**Introduction** An investigation of success rates of cannulating a 'virgin' papilla during endoscopic retrograde cholangiopancreatography (ERCP) at a tertiary referral centre, compared against Joint Advisory Group (JAG) guidelines, and assessment of the reasons for failure.

**Methods** Retrospective review of Endosoft database and radiology records of patients who underwent ERCP conducted between 2006–2012 (n = 1519) at the Gastroenterology department, St Thomas' Hospital, London. Specifically 'virgin' papillae were considered, defined as those with no evidence of prior cannulation, stents *in situ* or sphincterotomies (n = 795), as these represent the most challenging and repeatable targets for endoscopists.

**Results** Over the 7 year period, the overall ERCP cannulation success rate per patient was 86, or 79% per virgin papilla procedure. By defining an 'accessible' (see Table) virgin papilla, a 90% success rate was achieved for each procedure, as well as per patient. Procedure success rates per consultant ranged from 79 – 89% for virgin, and 94 – 99% for non virgin cannulations, highlighting the need for careful definition of success criteria. Chronic pancreatitis was the only statistically significant indication associated with a failed cannulation (OR=3.3, CI: 1.7–6.4), and previous failure begat subsequent failure (OR=2.2, CI: 1.1–4.4). Reasons for failure included previous gastroduodenal surgery (OR=48.9, CI: 6.3–379.2), papilla tumour impingement (OR=57.8, CI: 7.5–443.3), duodenal stricturing (OR=36.0, CI: 4.5 – 286.3).

**Conclusion** The 79% success rate for virgin papilla cannulation at a tertiary referral centre needs to be understood in context of JAG's recommended 80% success for overall therapeutic intent. As can be seen, depending on the way we define the duct, and therapeutic intent, we can fall short or far exceed the JAG guidelines. We believe that our data shows that the JAG benchmark for therapeutic success at initial attempt for trainees, and even for established ERCP-ists is currently too ambitious, since therapy requires cannulation to be achieved, and therapeutic success is not universal after successful diagnostic ERCP. We also believe that any measure of success needs to include the minimum criteria of whether the papilla was virgin, accessible, or associated with either previous failure or intended pancreatic therapy. As a corollary of this work we hope to encourage other units to publish clearer definitions when defining success.

**Disclosure of Interest** None Declared.



Abstract PTH-007 Figure 1

# **PTH-008 SAFETY AND EFFICACY OF BALLOON SPHINCTEROPLASTY USING CONTROLLED RADIAL EXPANSION (CRE) BALLOON DURING ENDOSCOPIC RETROGRADE CHOLANGIO PANCREATOGRAPHY IN THE MANAGEMENT OF LARGE COMMON BILE DUCT (CBD) STONES: A DISTRICT GENERAL HOSPITAL EXPERIENCE**

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**Introduction** Extraction of large (>1 cm) CBD stones at ERCP is often difficult despite adequate sphincterotomy. Failure of extraction of stones warrants repeat ERCPs and also referral to advanced techniques such as extracorporeal shock wave lithotripsy which is not readily available in UK centres. We believe that balloon sphincteroplasty is a safe and effective procedure which is underutilised. We describe a large district general hospital experience of use of balloon sphincteroplasty in a cohort of elderly patients.

**Methods** All patients who underwent balloon sphincteroplasty since June 2012 at Princess Royal Hospital, Bromley were identified from endoscopy database. Patients demographics, sedation dose, size of balloon sphincteroplasty, success rate of CBD stones clearance and complications were examined.

**Results** A Total of 29 patients underwent balloon sphincteroplasty. 8 (27%) of these patients had previous unsuccessful attempt at ERCP removal of stones. All patients had sphincterotomy prior to sphincteroplasty. Mean age of patients was 72 years. There were 20 female and 9 male patients. Mean dose of Midazolam was 4 mg and Fentanyl 75 mg. Mean size of the CBD stones in these patients was 13 mm (range 10–20 mm). 8 patients had large peri-ampullary diverticulum (6 patients had ampulla at the edge of diverticulum, one <5 mm).

Balloon sphincteroplasty using Boston Scientific CRE balloon was performed. Mean size of balloon sphincteroplasty was 14 mm (range 10–20 mm and median 15 mm). Stone retrieval basket was used in 6 patients. Complete extraction of CBD stones was documented in 28 of 29 (97%) patients.

One patient developed uncomplicated pancreatitis who recovered with conservative management. One patient had minor bleeding which settled spontaneously. None of the patients had perforations. Stone clearance was incomplete in one patient due to a small proximal stone floated up in to the left hepatic duct. On median follow up of 6 months 1 patient underwent repeat ERCP for recurrence of stones.

**Conclusion** In our district general hospital cohort of elderly patients, Balloon sphincteroplasty was found to be safe and effective procedure in extraction of large common bile duct stones. Complete extraction of CBD stones was achieved in 97% of patients. One patient had mild pancreatitis, one had mild bleeding and there was no of perforations observed. Balloon sphincteroplasty was particularly useful in patients with peri-ampullary diverticulum in whom a generous sphincterotomy could

be risky. Balloon sphincteroplasty had prevented the further need for ERCP and its associated cost and morbidity.

#### REFERENCE

Maydeo A, Bhandari S, et al., *Endoscopy* 2007; 39 (11)

**Disclosure of Interest** None Declared.

#### PTH-009 ERCP UNDER PROPOFOL: DO PATIENTS PREFER IT?

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**Introduction** Endoscopic retrograde cholangiopancreatography (ERCP) is an invasive procedure involving heavy sedation. Use of propofol as sedation in ERCP has been demonstrated to be safe, but is it preferred by patients?

**Methods** A prospectively collected dataset of patient satisfaction questionnaires post ERCP, using a Likert scale. Patients excluded were those who declined to do so, those unable to consent for themselves. After 30 days patients were contacted by an ERCP-trained nurse to discuss any problems and complications arising in that time.

**Results** 128 questionnaires have been completed and followed up at 30-days. 26 had the procedure under propofol +/- midazolam and fentanyl (administered by an anaesthetist) and 102 under a combination of midazolam and fentanyl as per standard unit practice administered by the ERCPist. 30-day FU: 93 of 103 agreed to contact, 16 of whom were uncontactable (based on 2-3 separate attempts to call them on the number provided), 4 of 23 uncontactable from propofol group. 5 propofol patients reported problems in the 30 day follow up (2 were serious), compared to 24 of the sedation group (4 of which were serious).

There was no difference in overall satisfaction between the groups, the propofol group reported less discomfort during the procedure ( $p < 0.001$ ), less writhing ( $p = 0.015$ ) and were more willing to have the procedure repeated ( $p = 0.051$ ).

Using a score of 1 and 2 for satisfied and anyone reporting a score of 3-7 as less or not satisfied, the factors associated with less satisfaction were discomfort during the procedure ( $=0.006$ ), overall discomfort ( $p = 0.001$ ), overall rating of experience and unwillingness to repeat the procedure ( $p < 0.001$ ). After adjusting for age, gender and number of interventions there was no association between propofol use and non satisfaction (adjusted OR 1.12 (95% CI: 0.28-4.45),  $p = 0.868$ ).

**Conclusion** Patients do prefer ERCP under propofol, but not by much. They get less discomfort (where 0 was a scale of no discomfort and 7 of extreme pain) and therefore are more willing to have the procedure done again. Interestingly propofol procedures are not taking longer than normally-sedated procedures and there are not higher numbers of therapeutic interventions.

This may reflect the current bias in selecting a propofol list for a patient or form part of the learning curve of finding the role of propofol-ERCP in the therapeutic strategy.

Further data collection is required to see if ERCP under propofol reduces the number of repeat procedures and therefore can justify itself as cost-effective.

**Disclosure of Interest** None Declared.

#### PTH-010 THE SAFETY AND EFFICACY OF TRANSPANCREATIC SPHINCTEROTOMY FOR DIFFICULT CBD CANNULATION DURING ERCP: A DISTRICT GENERAL HOSPITAL'S EXPERIENCE

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**Introduction** Transpancreatic sphincterotomy (TPS) for difficult common bile duct cannulation during ERCP was first described by Goff in 1995. Since then its safety and efficacy has been debated with some concerns regarding high post ERCP pancreatitis rates (PEP). In published data from recent years PEP can range from 6-20% when TPS is carried out. The majority of TPS is carried out in tertiary referral centres but it is a technique that we have increasingly adopted in our district general hospital when common bile duct cannulation is proving difficult. We wished to review the safety and efficacy of this technique and compare our results to the literature

**Methods** We reviewed all procedure notes from ERCPs that have been carried out from October 2011 - October 2013. The reports were reviewed and any cases where transpancreatic sphincterotomy was performed were identified. We subsequently reviewed our radiology reporting system, the patients discharge letter and blood results as well as any subsequent hospital admissions to determine any complications. We noted any post ERCP pancreatitis, upper GI bleeding, perforation or death. Complications were classified using the system proposed by Cotton *et al.* We compared our complication rates to our departments overall complication rates

**Results** Out of 811 ERCPs carried out in the date range 31 patients were identified who had a transpancreatic sphincterotomy performed. 21 cases (68%) were performed by a consultant whilst 10 cases (32%) were performed by a senior registrar. Successful CBD cannulation was achieved in 25 patients (80%) and in the 6 that failed it was subsequently successful at a later date in 4 patients. Our complication rates are shown in the below table

**Conclusion** Our results show that transpancreatic sphincterotomy can be carried out at a district general hospital with similar levels of success and complications as reported in the literature from tertiary centres worldwide. In such a small data set a single patient death can bias the results and on reviewing the notes the patient died from a perforation due to a common bile duct stent

**Abstract PTH-010 Table 1** Complication rates

complication	Standard complication rate	TPS complication rate and severity
Perforation	0.18%	3% (1 patient) - Fatal
Bleeding	0.33%	3% (1 patient) moderate
Post ERCP pancreatitis	0.42%	6% (2 patients) both moderate
Death	0.23%	3% (1 patient)