### PWE-203 | CAPSULE ENDOSCOPY: A DISTRICT GENERAL HOSPITAL **EXPERIENCE IN A MULTIETHNIC COMMUNITY**

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Introduction Capsule endoscopy (CE) is a useful tool to assess the small bowel (SB). The 2008 British Society of Gastroenterology (BSG) guidelines detailed the use of CE in occult gastrointestinal bleeding (OGIB) and suspected SB Crohn's disease (CD). At present, CE is not available in all district general hospitals (DGH). Our aim was to ascertain the indications for referral and evaluate the diagnostic yield of this test in a multiracial North West London DGH.

**Methods** We conducted a retrospective analysis of all CE undertaken from April 2009 to December 2011. 136 patients [60 male (44.1%)] and 76 female (55.9%); mean age 53.1] were included in this study. Data were collected on patient demographics, previous diagnostic investigations, indications and findings of CE.

Results See Abstract PWE-203 table 1 below. Patients referred for OGIB had negative bidirectional endoscopies. Patients with abdominal pain had imaging to exclude strictures. There were no cases of capsule retention. CE in OGIB revealed the main diagnoses were SB telangiectasia (9/68; 13.2%), non-specific SB inflammation and ulceration (9/68; 13.2%) and erosive gastritis (7/68; 10.3%). Two cases each of portal hypertensive gastropathy, CD, coeliac disease and polypoid lesions were diagnosed (total 11.8%) and one case of angiodysplasia and lipoma (2/68; 3%). Suboptimal views were obtained in 8/68 (11.8%) while CE was normal in 25 patients (36.8%). In the suspected CD group, 14 patients (14/57; 24.6%) were diagnosed with CD (at least 3 SB apthous ulcers and erosions). Nonspecific inflammation (5/57; 8.8%) and erosive gastritis (5/57; 8.8%) were also found. Suboptimal views affected five cases and 25 patients (43.9%) had normal CE. One case each of coeliac disease, radiation enteritis and intestinal lymphangiectasia were also diagnosed. One case of SB lymphoma was diagnosed as a complication of coeliac disease. Subgroup analysis according to ethnicity in suspected CD revealed 29 Caucasian (50.9%), 26 Asian (45.6%) and 2 (3.5%) patients of African descent. CD was diagnosed in 8 Caucasians and 6 Asians.

Abstract PWE-203 Table 1 Indications for referral

Indications	Number of patients (%)
Suspected SB CD	57 (41.9%)
OGIB	
Overt GI bleeding	52 (38.2%)
Iron deficiency anaemia	16 (11.8%)
Coeliac disease complications	7 (5.2%)
Suspected SB tumour	3 (2.2%)
Polyposis syndromes	1 (0.7%)
Total	136

Conclusion In our cohort, diagnostic yield for CD was less than other studies (24.56% vs 43-71%). This may reflect the prevalence of CD in an Asian minority area. SB telangiectasia and ulceration were the main sources of OGIB. CE is a safe and useful technique to evaluate the SB and we recommend its use in the DGH setting.

Competing interests None declared.

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### PWE-204 DOES CHOLANGIOSCOPY IMPROVE THE DIAGNOSIS OF "INDETERMINATE" BILIARY STRICTURES?

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**Introduction** The precise assessment of a biliary stricture can be challenging. Multi-modal imaging with CT/MR and EUS can generally determine the nature of a biliary stricture and EUS in particular, can offer histological diagnosis. However, ERCP is often necessary for diagnostic evaluation and management of biliary strictures and biliary cytology performed at ERCP has a diagnostic yield of only 10-40%. Assessment of focal intrahepatic strictures can thus, be even more difficult. Cholangioscopy offers the advantage of tissue sampling under direct vision, thereby enhancing diagnostic precision. The aim of the study was to review our experience of cholangioscopy in the assessment of biliary strictures. Methods A review of a prospectively maintained database of all procedures involving per oral single operator cholangioscopy at our institution (June 2008-2011), was performed. "Indeterminate" strictures were defined as biliary strictures referred for diagnostic evaluation with previous negative cytology. Other biliary strictures were referred for evaluation after negative EUS-FNA, or directly based on radiological abnormalities. Follow-up data were acquired through case note review and phone calls to referring hospitals. Summary statistics were applied.

Results 72 patients underwent cholangioscopy for "indeterminate strictures" during the study period (42 males, mean age 64 years (SD 11)). These patients had a total of 228 investigations performed as part of their evaluation (mean 3 investigations/person). 39 (54%) had a previous ERCP (range 1-6 procedures per person). At cholangioscopy, adequate mucosal visualisation was achieved in 64 (89%) and direct biopsy sampling was carried out in 36 (50%) patients. 35 patients needed prior sphincterotomy. Tissue diagnosis was achieved in 54 (75%) patients (15 cholangiocarcinoma, 5 PSCrelated strictures, 12 ischaemic/inflammatory, 1 biliary leiomyoma and 21 normal tissue). 6 (10%) had complications related to the procedure (5 cholangitis, 1 post-sphincterotomy bleed). On followup (mean 10 months (range 2–24 months), four patients underwent surgery (2 cholangiocarcinoma, 2 ischaemic/inflammatory strictures), 13 had endoscopic palliation for cholangiocarcinoma, of which seven died (mean 9 months).

Conclusion Cholangioscopy is valuable tool in the diagnostic evaluation of biliary strictures.

Competing interests None declared.

PWE-205

# PROPOFOL-BALANCED ANAESTHESIA FOR SINGLE BALLOON ENTEROSCOPY: A COMPARISON BETWEEN ANTEGRADE AND RETROGRADE INTUBATION

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**Introduction** Single balloon enteroscopy (SBE) procedure is a procedure for diagnosis and treatment in patients with abnormality of gastrointestinal tract especially for small bowel. It commonly performed either anterograde or retrograde intubation. The aim of the study is to compare and evaluate the success rate of propofolbalanced anaesthesia (PBA) for the SBE procedure between antegrade and retrograde intubation.

**Methods** We undertook a retrospective review of the sedation service records of patients who underwent SBE by using PBA technique. All procedures were classified into two groups according to route of the

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intubation: group A (antegrade) and group B (retrograde). The primary outcome variable of the study was the successful completion of the procedure. Failed procedure is defined as the procedure can not be completed by using PBS technique or sedation-related serious adverse events such as severe hypoxaemia (SpO<sub>2</sub> <85% more than 3 min and can not relief by airway management), severe cardiorespiratory instability, are occurred. The secondary outcome variables were sedation-related complications, mortality rate and haemodynamic parameters.

Results 108 patients underwent SBE procedure during the study period. After matching age, gender, weight, height, ASA physical status, duration of endoscopy and indications of procedures, there were 21 patients in group A and 19 patients in group B. There were no significant differences in age, gender, weight, height, ASA physical status, duration and indication of procedures, type of enteroscopy, anaesthetic personnel and haemodynamic parameters between the two groups. All procedures were successful completion of the endoscopies. Mean dose of propofol, fentanyl and midazolam in both groups was comparable. Overall and cardiorespiratoryrelated adverse events were not significantly different between the two groups. All adverse events were transient, mild degree and easier treatable. Serious adverse events were none.

Conclusion PBA for SBE procedure in adult patients by experienced anaesthesiologist is relative safe and effective. The success rate of the endoscopy does not depend on the route of intubation. Serious adverse events were rare in our population.

Competing interests None declared.

# PWE-206 | PROPOFOL DEEP SEDATION FOR ELDERLY PATIENTS: A **COMPARISON BETWEEN EUS WITH OR WITHOUT FINE NEEDLE ASPIRATION PROCEDURE**

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**Introduction** The aim of this study was to evaluate and compare the clinical efficacy of propofol deep sedation (PDS) for elderly patients underwent EUS with or without fine needle aspiration (FNA) procedure in a teaching hospital in Thailand.

**Methods** We undertook a retrospective review of the sedation service records of patients who underwent EUS procedures from December 2006 and September 2009. All patients were classified into two groups according to the type of procedure. In group A, EUS was only done for diagnosis. In group B, EUS with FNA was done. The primary outcome variable of the study was overall complication rate. The secondary outcome variables were sedation and procedurerelated complications during and immediately after the procedure and haemodynamic parameters.

Results PDS was provided for 513 patients. After matching age, gender, weight and ASA physical status, there were 47 patients in group A, and 40 patients in group B. There were no significantly differences in age, gender, weight, ASA physical status, mean sedative agents used, and indications of endoscopy between the two groups. However, duration of procedure in group B was significantly longer than in group A. All patients in both groups were concluded with the successful completion of the procedure. There were no significant differences in overall complication rate, sedation and procedure-related complications as well as haemodynamic parameters among the two groups. All complications were easily treated, with no adverse sequelae.

Conclusion PDS for EUS with or without FNA procedure in elderly patients by trained anaesthetic personnel with appropriate monitoring was relatively safe and effective. Complications in both groups were comparable. Serious complications were rare in our population.

Competing interests None declared.

PWE-207

#### **BILE DUCT LEAKS FROM AN ABERRANT DUCT OF** LUSCHKA

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Introduction The Duct of Luschka is an accessory biliary radicle first described by the German anatomist Hubert von Luschka in the 19th century. If this aberrant duct goes unnoticed at the time of cholecystectomy, the patient is likely to develop a biliary leak postoperatively. The majority of post-operative leaks are from the cystic duct remnant and standard management is ERCP and stent insertion across the cystic duct +/-sphincterotomy. The aim of our study was to identify the number of leaks from an aberrant "Duct of Luschka" in patients who underwent laparoscopic cholecystectomy over a 14-year period and to evaluate the efficacy of ERCP in their management.

**Methods** This retrospective study included all patients undergoing cholecystectomy between 1994 and 2010. Those who had a subtotal cholecystectomy were excluded. ERCP reports were reviewed to identify the number of biliary leaks. The medical notes of each patient with an aberrant duct leak were reviewed to evaluate their management.

**Results** For 5221 laparoscopic cholecystectomies there were 97 biliary leaks (1.9%), 86 from the cystic duct remnant and 11 from an aberrant duct. In two patients found to have leaks from a Duct of Luschka during surgery, the laparoscopic approach was converted to an open procedure and one patient had a drain inserted at initial laparoscopy. Eight patients had a repeat laparoscopy with a washout and drain insertion. Two patients had CT guided drain insertion. Time to ERCP after presentation varied from 1 to 10 days, with the majority being done between day two and day five. Of the eleven, four patients had a sphincterotomy and stent insertion, five had stent insertion alone and two patients had no therapeutic intervention as the leak was felt to be too small. Eight patients had a repeat ERCP with stent removal and no residual leak on cholangiogram. One person was lost to follow-up. No patients required surgery after ERCP to control the leak. Arrow below: leaking aberrant Duct of Luschka.



Abstract PWE-207 Figure 1

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