

**Methods** All colonic stents inserted between 1<sup>st</sup> January 2008 and 31<sup>st</sup> December 2011 were included. Patient characteristics, procedure related data, outcomes and survival were recorded retrospectively from health records.

**Results** Systematic review of 29 case series of stent insertions reported a clinical success rate of 88%, 10% stent migration rate, 4% perforation rate, 10% reobstruction rate and 1% procedure-related mortality rate[3]. These were applied as our audit standards.

A total of 69 colonic stents (in 64 patients, 35 male, mean age 74.2 years) were inserted. 15 stents were inserted in 2008 and this increased steadily to 25 in 2011. The most common indication for colonic stent insertion was a malignant stricture (89.9%). There was a 98.5% technical success rate, 2.9% migration rate, 7.2% perforation rate and a 4.3% reobstruction rate within one month of the procedure. The clinical success rate, ie successful stent insertion and decompression within 96 hours, was 88.4%.

61.1% had stent insertion as a bridge to surgery. Mean survival post procedure was 200 days (range 1–779 days). There were 2 deaths as a direct consequence of the procedure (2.9%), both of which followed perforation in patients who were too frail to undergo surgery.

**Conclusion** We have defined and applied audit standards for colonic stent insertion. Success and complication rates at our hospital compare favourably to published rates. There is a steady increase in colonic stent insertions and in our 2011 cohort this equated to 67.6 patients per million per annum. It is likely that this number will continue to increase and endoscopy units should take this into account when planning their service provision. Audit support will be essential, and we encourage the adoption of consistent audit standards to facilitate comparison between units.

**Disclosure of Interest** None Declared.

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## PTH-064 NARROW BAND IMAGING FACILITATES DETECTION OF INLET PATCHES IN THE CERVICAL OESOPHAGUS

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**Introduction** Ectopic gastric mucosa in the cervical oesophagus (inlet patch) is easily missed on endoscopic examination because of its localization, usually just below the upper oesophageal sphincter. In some individuals, an inlet patch might cause symptoms such as dysphagia, globus sensation, odynophagia or coughing.

We prospectively investigated whether narrow band imaging (NBI) during endoscopic inspection of the cervical oesophagus improves the visualisation of heterotopic gastric mucosa and increases the detection rate of inlet patches.

**Methods** Subsequent upper gastrointestinal endoscopies were performed by three experienced endoscopists using videoendoscopes with NBI option (Olympus Lucera Spectrum system). Between 01/02/2010 and 01/12/2011, patients with various indications for upper gastrointestinal endoscopy were consecutively assigned to the lists of three specialists in endoscopy. One endoscopist routinely applied NBI during extubation of the endoscope (NBI) in addition to standard white light endoscopy, the second was aware of the study, but did not routinely use NBI, the third was unaware of the study and did not use NBI. The presence of an inlet patch was documented by photo imaging.

**Results** 1407 upper endoscopies were performed. When NBI was used during extubation of the oesophagus, inlet patches were detected in 17 out of 510 endoscopies. The detection rate of inlet patches using NBI (3.3%) was significantly higher than in conventional white light endoscopy only (10/897; 1.1%;  $p = 0.007$ ), whether the endoscopist was aware (4/382; 1.1%;  $p = 0.026$ ) or unaware of the study (6/515; 1.2%;  $p = 0.02$ ). Using NBI, the relative chance to detect an inlet patch increases about threefold (odds ratio 3.05, 95% CI 1.39–6.71).

**Conclusion** Withdrawal of the endoscope from the cervical oesophagus using narrow band imaging increased the detection rate of inlet patches about threefold compared to standard white light endoscopy. NBI may assist in the accurate assessment of patients presenting with globus sensation, dysphagia or chronic cough, to identify rare causes such as an inlet patch that may be amenable to therapy.

**Disclosure of Interest** None Declared.

## PTH-065 DIAGNOSTIC AND THERAPEUTIC UTILITY OF SPYGLASS SINGLE OPERATOR PERORAL CHOLANGIOSCOPY FOR INDETERMINATE BILIARY LESIONS: A SINGLE CENTRE EXPERIENCE IN SCOTLAND

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**Introduction** The SpyGlass single-operator peroral cholangioscopy is a promising technique designed to overcome some of the limitations of conventional peroral cholangioscopy. We aimed to evaluate the diagnostic utility of the SpyGlass system in a cohort of patients with indeterminate biliary strictures and lesions.

**Methods** All patients who were listed for SpyGlass cholangioscopy for further evaluation or treatment of indeterminate strictures or filling defects previously identified at ERCP or other imaging modality were included in this study. After SpyGlass direct visual evaluation, targeted biopsies were taken with the SpyBite forceps and histopathological assessment was made by experienced gastrointestinal pathologists.

**Results** Between April 2009 and January 2013, 21 subjects (mean age 60, 12 males) underwent SpyGlass cholangioscopy for indeterminate biliary strictures ( $n = 12$ ) or filling defects ( $n = 9$ ). SpyGlass cannulation was not possible in 1 subject. In those with previously identified strictures, 8/12 had a stricture identified during SpyGlass, 2 as probable malignant and 6 as benign strictures using endoscopic criteria. In those with filling defect, choledocholithiasis was identified in 7 subjects and 1 subject was found to have a villous adenoma. The cholangioscopy was reported normal in 4 subjects (19%). SpyBite biopsies were taken in 10 subjects with histology showing inflammation ( $n = 5$ ), atypia ( $n = 2$ ), adenoma ( $n = 2$ ) and normal ( $n = 1$ ) giving a biopsy adequacy of 100%. Overall, the SpyGlass evaluation agreed with the histopathologic evaluation of SpyBite-targeted biopsies in 8/10 (80%) cases and therefore a definitive diagnosis was made in 18/21 (86%) patients. There were no serious complications with only 1 case of mild pancreatitis, 1 case of liver abscess (after 2 weeks) and 6/15 patients received prophylactic antibiotic. Two subjects have had successful surgery for cholangiocarcinoma and all but 1 subjects are alive at the mean follow-up period of 19 months.

**Conclusion** Using the SpyGlass cholangioscope, a definitive diagnosis can be made with a high accuracy in 86% of patients with indeterminate biliary lesions. This is primarily due to direct visualisation and targeted biopsy sampling. Therefore, the SpyGlass system should be considered in all patients with indeterminate biliary lesions.

**Disclosure of Interest** None Declared.