ERCP alone for stone disease. This likely reflects the high complexity of stone cases necessitating cholangioscopy. Of note, the radiation exposure/minute for ERCP with cholangioscopy in stone disease is no different to conventional ERCP. Our data on cholangioscopy in stricture assessment suggests that this may enhance diagnostic information (ie direct visualisation) without adding procedure time or radiation exposure.

PTH-013 A VALIDATED COMFORT SCORE FOR GASTROSCOPY TOLERATION

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Introduction Whilst comfort scoring is an auditable standard for quality in colonoscopy, there is currently no widely accepted comfort score for gastroscopy. We developed a five point gastroscopy toleration score (GTS) and validated correlation of scoring between endoscopists, patients and nursing staff.

Methods A GTS was developed via consensus on a gastroscopy list (figure 1). Trial 1 of the finalised 'Bath GTS' involved a double blind collection from the endoscopist and two nurses during 47 gastroscopies to determine inter-observer correlation between staff. Trial 2 involved a double blind collection from the endoscopist, nurse and unsedated patient during 50 additional cases. Krippendorff's alpha(α) coefficient was calculated to assess inter-rater reliability. We then analysed sub-group matches between endoscopist-nurse, endoscopist-patient and nurse-patient.

Results A total of 97 gastroscopies were included in the analysis. In Trial 1 the inter-rater correlation between nurses and endoscopist was excellent (Krippendorff's $\alpha=0.811$ (95% CI 0.73–0.88)). There were no matched scores in 1 case (2.1%), at least two matched scores in 46 cases (97.9%) and three matched scores in 34 cases (72.3%).

Bath Gastroscopy Toleration Score (GTS)

- 0-** Still throughout, may retch at intubation
- 1-** Minimal retching (<25% of procedure time)
- 2-** Frequent retching (>25% of procedure time)
- 3-** Attempts to handle and/or remove gastroscope
- 4-** Extubates themselves or withdraws consent

Abstract PTH-013 Figure 1

Trial 2 demonstrated at least two matched scores in all 50 cases (100%) and three matched scores in 39 cases (78%) with excellent correlation between raters ($\alpha=0.833$ (95%CI 0.75–0.90)). Subgroup analysis demonstrated that of the gastroscopies with only two matched scores, endoscopist-nurse matches totalled 8 cases (72.3%), endoscopist-patient matches totalled 2 cases (18.2%) and nurse-patient matches 1 case

(9.10%). Krippendorff's α for these subgroups were 0.930 (95% CI 0.84–1.00), 0.800 (95%CI 0.63–0.93) and 0.774 (95%CI 0.60–0.92) respectively. Final analysis comparing endoscopist-nurse matched scores from all 97 gastroscopies showed significant agreement ($\alpha=0.858$ (95%CI 0.81–0.91)).

Conclusions We have presented a simple yet effective GTS which was validated for inter-observer correlation between endoscopists and nurses with statistically significant agreement. Furthermore, there is excellent correlation when the GTS from unsedated patients is compared with that of staff ($\alpha=0.833$ (CI 0.75–0.90)). Given the agreement between unsedated patients and staff regarding procedure toleration, this scoring system could be applied to sedated patients. We would suggest that the Bath GTS is adopted as a validated national auditable outcome for gastroscopy with further work in progress to determine the standard.

PTH-014 POST-POLYPECTOMY SURVEILLANCE IN THE ENGLISH BOWEL CANCER SCREENING PROGRAMME: A PROSPECTIVE COHORT STUDY, PRELIMINARY RESULTS

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Introduction The English Bowel Cancer Screening Programme (BCSP) offers individuals aged 60 to 74 years guaiac FOB testing (gFOBt), with an invitation for colonoscopy if positive. Of more than 3 00 000 individuals who have attended for colonoscopy, over 45 000 attended post-polypectomy surveillance (PPS) after having intermediate (IR) or high risk (HR) adenomas detected and resected at screening. It is established that screening reduces mortality from colorectal cancer (CRC). However, robust evidence to support PPS is lacking.

Methods Details were extracted from the BCSP database for individuals who attended PPS from the start of the BCSP in 2006 until 3/1/2017. Data were analysed using Stata 14.

Results 67,435 PPS episodes were performed in 45 151 individuals. 60% of individuals had attended only 1 PPS episode, 34% attended 2, 5% attended 3, and 0.4% attended 4 or 5.

PPS episodes per year greatly increased over the study period. In 2008, 453 episodes were attended, rising to 13 698 in 2016 (figure 1).

70% of those attending PPS were male. 44% were aged 60–64 at the time of index screening, 43% aged 65–69, and 10% aged 70–74. The oldest age group had a higher proportion (68%) of HR individuals than in the younger groups.

Screening risk category varied with gender. Overall, 40% of females and 51% of males were HR (figure 2).

Overall, the findings at first PPS demonstrate a high proportion of individuals with no further adenoma found (table 1).

Conclusions PPS accounts for an increasing proportion of endoscopy workload in the BCSP and more broadly in the UK and internationally. These results demonstrate a low proportion of CRC or IR or HR adenomas diagnosed at PPS in the BCSP.

Individuals with HR adenomas at screening more often had further adenomas detected at first PPS when compared to those with IR adenomas at screening. HR individuals also had a higher probability of IR or HR adenomas at first PPS. CRC diagnosis at first PPS was low in both groups ($\leq 0.5\%$).

Further evaluation of the BCSP database is ongoing in order to identify subgroups most likely to benefit from PPS.

Abstracts

Abstract PTH-014 Table 1 Outcome of 1st PPS episode, by risk group at screening

Outcome of 1st PPS		No adenoma	LR	IR	HR	CRC
HR at screening	proportion (95% CI)	0.39 (0.386–0.399)	0.37 (0.366–0.379)	0.15 (0.145–0.155)	0.08 (0.075–0.082)	0.005 (0.0039–0.0058)
	n	8225	7821	3161	1651	102
IR at screening	proportion (95% CI)	0.56 (0.555–0.568)	0.32 (0.317–0.329)	0.08 (0.073–0.080)	0.03 (0.030–0.035)	0.004 (0.0036–0.0053)
	n	12 869	7422	1766	755	100

Abstract PTH-014 Figure 1 Surveillance episodes by year **Abstract PTH-014 Figure 2** Screening category, age & gender

PTH-015 A UNIVERSITY HOSPITAL EXPERIENCE OF UPPER GI BLEEDING IN PATIENTS ON NOVEL ORAL ANTICOAGULANTS

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Introduction The novel oral anticoagulants (NOACs), are increasingly favoured over conventional anticoagulants given their convenience and reduced drug interactions. Although NOACs have a favourable safety profile, the innate risk of haemorrhagic complications, including upper gastrointestinal bleeding (UGIB) is still a concern in high-risk patients. In light of this, we reviewed the outcomes of UGIB in patients on NOACs in our institution and compared them to patients not receiving any anticoagulation.

Methods We identified inpatients on NOACs from a prospectively collected audit of 680 consecutive gastroscopies performed in 600 patients with UGIB between 1 August 2016 to 30 November 2017.

Results (NOAC patients): 42 patients (avg age 76.8 years, range 36–91, 50% female) on NOACs underwent a gastroscopy for UGIB, 32 on Apixiban and 10 on Rivaroxaban. Nine (21.4%) were co-prescribed antiplatelet agents. Most common indications for anticoagulation were atrial fibrillation (78.6%) followed by thromboembolic disease (21.4%).

12 patients (28.6%) required endotherapy, with the most commonly encountered pathology being duodenal ulceration, followed by gastric ulceration. Four patients re-bled, all of whom underwent repeat gastroscopy where definitive haemostasis was achieved.

Six patients (14.3%) died within 30 days of their gastroscopy (avg age 82.2 years, range 73–88), 3 as a direct result of an UGIB. All deaths occurred in patients with multiple comorbidities.

Comparison to group without anticoagulation:

Patients on NOACs were older (76.8 years vs 63.9 years, p-value 0.0001), had slightly higher rebleed rates (9.5% vs 8.3%) and had a trend to higher UGIB related 30 day mortality rate (7.1% vs 2.4%).

Conclusions

1. A portion of patients on NOACs died as a direct consequence of GI bleeding.
2. All deaths occurred in elderly patients with multiple comorbid illnesses emphasising the importance of robust patient selection in NOAC prescription.
3. To date Dabigatran is the only NOAC with a licenced reversal agent, Idarucizumab. Until reversal agents are available for the other NOACs perhaps Dabigatran should be preferentially considered in high risk patients despite its limitations and bleeding risk.

PTH-016 TUNNEL BIOPSY IS AN UNDERUTILISED, SIMPLE AND SAFE METHOD FOR TISSUE ACQUISITION IN SUBEPITHELIAL TUMOURS

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Introduction Tissue acquisition from subepithelial lesions is most often attempted by EUS-guided fine needle aspiration/biopsy as conventional endoscopic biopsy usually fails to reach the lesion in deeper layers of the gastrointestinal wall. Tunnelled biopsy, a 'bite-on-bite' biopsy technique that penetrates