quality of bowel preparation or caecal visualisation/intubated rates (p=0.93).

Conclusion Moviprep® was tolerated much better when compared to Klean-prep® in terms of side effects and the willingness to take the preparation again. Having a preparation that is well tolerated may help with patient compliance and improve colonoscopic examination.

Competing interests None Declared.

PMO-202 USE OF THE BLATCHFORD SCORE TO IDENTIFY LOW-RISK UPPER GASTROINTESTINAL BLEEDS

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Introduction Acute upper gastrointestinal bleeding is a medical emergency associated with a significant health burden and risk of mortality. A significant proportion of patients are admitted to hospital unnecessarily for endoscopy following presentation with acute upper gastrointestinal bleeding. The Blatchford score can be used to identify patients with low-risk gastrointestinal bleeds suitable for discharge and outpatient endoscopy. However, some debate remains regarding what level of Blatchford score can be considered low-risk. The aim of this study was to assess the need for intervention in patients presenting with upper gastrointestinal bleeding based upon the admission Blatchford score.

Methods All patients admitted with acute upper gastrointestinal bleeding to Sandwell and West Birmingham Hospitals NHS Trust from 1 January 2009 to 31 December 2009 were included in the study.

Results Overall, 470 patients with acute upper gastrointestinal bleeding were admitted during the study period. Of these 67.2% were male and 32.8% female. The mean age of patients was 64.0±18.8 years. The most common diagnosis was peptic ulcer disease, which was found in 34.5% of patients. A Blatchford score of 0 accounted for 6.0% of patients (n=28) and 14.7% (n=69) had a Blatchford score ≤2. Of the patients admitted with a Blatchford score ≤2 none required intervention (transfusion, endoscopic therapy or surgery) and there were no deaths. These patients were significantly younger than patients with a Blatchford score >2 (mean age 44.1±17.5 years for a Blatchford score ≤2 vs 67.4±18.8 years for a Blatchford score >2).

Conclusion Patients with acute upper gastrointestinal bleeding with a Blatchford score ≤2 did not require inpatient intervention and can be considered for early discharge from hospital with outpatient endoscopy. This strategy identified 14.7% of patients in our population that were unnecessarily admitted. Using a Blatchford score of ≤2 may help to significantly reduce hospital admissions.

Competing interests None Declared.

PMO-203 DIRECT GASTRIC PUNCTURE AND GASTROPEXY (FREKA® PEXACT) INSERTION TECHNIQUE FOR PERCUTANEOUS ENDOSCOPIC GASTROSTOMY REDUCES PERISTOMAL INFECTION RATES COMPARED WITH STANDARD PULL-THROUGH INSERTION IN PATIENTS WITH HEAD AND NECK CANCER

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Introduction Patients with head and neck cancer often have a percutaneous endoscopic gastrostomy (PEG) inserted to provide nutritional support while undergoing treatment. The standard pull-through PEG technique is associated with a high incidence of peristomal infection. This is thought to be a result of pulling the PEG through the oral cavity which may be colonised with bacteria. In addition there is the risk of tumour seeding at the PEG site with this method. In our institution, such patients now have an endoscopical controlled introducer PEG (Freka® Pexact) with dual gastropexy inserted which avoids passage of the bumper through the oral cavity. We aimed to compare peristomal infection rates between the two methods of PEG insertion.

Methods We carried out a retrospective audit of PEG insertions in patients with head and neck cancer. Patients were identified using the ADAM® medical documentation system (Fujinon Europe GmbH, Willich, Germany) and the Nutrition team logs. Complications, peristomal infection and 30-day mortality were documented after review of case notes and liaison with Community Nutrition Nurses.

Results A standard pull-through PEG (16F Corflo®, Merck, UK) was inserted in 13 patients and 30 patients had a Freka® Pexact 15F (Fresenius Kabi, Germany) inserted. Of the Pexact group 76.7% were male (n=23); 84.6% (n=11) of the standard group were male. The mean age of patients was 58 years (range 35–81) in the Pexact group and 61 years (range 35–78) in the standard PEG group. Prophylactic antibiotics were prescribed to 83.3% (n=25) in the Pexact group compared with 100% (n=13) of the standard pull-through PEG group. In the standard PEG group 69.2% (n=9) developed peristomal infection compared with 36.7% (n=11) in the Pexact group. Immediate complications occurred in 15.4% (n=2) in the standard group and in none of those in the Pexact group. There were no deaths in either group at 30 days.

Conclusion The introduction of the direct gastric puncture and gastropexy technique led to a significant reduction of peristomal infections in patient with head and neck cancer. This new technique is well tolerated by patients.

Competing interests None declared.

PMO-204 ASSESSING RISK OF ADVERSE OUTCOME IN ACUTE LOWER GASTROINTESTINAL BLEEDING: ARTIFICIAL NEURAL NETWORK VS SIGN GUIDELINES AND BLEED SCORE

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Introduction The majority of patients with acute lower gastrointestinal bleeding (ALGIB) have a low risk of requiring intervention, rebleeding or death. Nevertheless in routine clinical practice most are admitted to hospital for observation and endoscopy increasing cost of care. There are no risk scores routinely used in clinical practice which differentiate high risk patients who should be admitted to hospital from those who could be managed as outpatients. British Society of Gastroenterology/Scottish intercollegiate guidelines network (SIGN) have published expert opinion based criteria for non-admission but the accuracy of these is unclear.

Methods The aim of this study was to compare an artificial neural network's (ANN) performance in distinguishing high-risk from low-risk patients with ALGIB to SIGN guidelines (six clinical variables) and BLEED score (five clinical variables). Data were collected retrospectively from patients with ALGIB who were admitted to the emergency department of a teaching hospital between 2007 and 2010 (n=174). A multi-layered perceptron ANN model using back propagation and logistic activation function with hidden nodes to

make a prediction was constructed from 35 clinical and laboratory variables. The ANN was trained and validated internally using leave-one-out method. The primary composite end point was the need for intervention, rebleeding or death. Sensitvity, specificity, predictive values and accuracy were calculated to compare the performance of the scores in predicting the composite end point.

Results Overall demographics and outcome of the 174 patients identified with ALGIB were: mean age 68 year (range 16–99), male: female 1:1, rebleeding rate (16.1% n=28), 30 day in hospital mortality (2.3% n=4). The most common diagnoses were diverticular disease (36%), haemorrhoids (10%) and colorectal carcinoma (10%). Twenty-three patients (13%) required intervention; endoscopic therapy (n=7), angiographic embolisation (n=8), or surgery (n=8). Notably, only four (2.3%) patients satisfied the SIGN criteria for non-admission. Predictive scores for each tool were: ANN (sensitivity 50%, specificity 83%, PPV 44%, NPV 83%), BLEED (sensitivity 67%, specificity 44%, PPV 28%, NPV 81%) and SIGN (sensitivity 100%, specificity 3%, PPV 25%, NPV 100%). The ANN performed significantly better in predicting the composite outcome (accuracy 0.76, 95% CI 0.70 to 0.83) compared with BLEED (0.49, 95% CI 0.42 to 0.57) and SIGN (0.26, 95% CI 0.20 to 0.33) scores.

Conclusion A non-endoscopic based artificial neural network model was more accurate than published guidelines/scores in predicting an adverse outcome in patients with ALGIB.

Competing interests None declared.

PMO-205 PHOTOGRAPHIC CONFIRMATION OF COMPLETE COLONOSCOPY

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Introduction Establishing intubation of caecum is an important aspect of quality indicator[1] of colonoscopy, BSG recommendation is that photographic and written confirmation of caecal intubation is kept.

Aims

1. Establishing reliability of photodocumentation of caecum as evidence of caecal intubation in a DGH setting.
2. Reproducibility of findings.

Methods A retrospective study of 100 consecutive endoscopic (single) caecal photographs documented by eight endoscopists (7 consultants, 1 SPR) were collected onto a spreadsheet. Nine endoscopists then independently scored the photographs anonymously using a range from 1 to 6 as tabulated to determine the strength of the photograph as displaying caecal intubation. Seven photographs were duplicated in sheet 1 and sheet 5 to assess intra-observer reproducibility.

Results The results were as follows for the first part of the study:

Intra observer variablity (numer of sets of pictures with difference in score of more than 1 point) was 5 out of 63 (7.93%) was good, but there was poor agreement between observers.

Conclusion In 48% of assessments the photograph was assessed as either definitely caecum or likely caecum. These results are higher than found in some previous studies.[2–5] Factors including poor bowel preparation, caecal anatomy, patient tolerance of the procedure can influence the quality of photographs. It would be interesting to know if multiple photographs gave better results. Other methods including video (as opposed to still) photography 6, barium x-rays have also been recommended.

Abstract PMO-205 Table 1

Score	Description of score	Number of photos	Percentage
1	Not known	1	0
2	**Definitely caecum**	**246**	**26**
3	**Likely caecum**	**208**	**22**
4	Maybe caecum	212	22
5	Unlikely caecum	147	16
6	Not caecum	135	14

Competing interests None declared.

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PMO-206 POST COLONOSCOPY CANCERS IN 5-YEAR INTERVAL

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Introduction To evaluate the risk of colorectal cancer in a 5-year period after a negative colonoscopy (PCCRC).

Methods Data of patients undergoing colonoscopy in a 1-year period from January to December 2004 collected from endoscopy database (847 cases), and matched electronically with patients diagnosed with CRC in the next 5 years. 60 matches were made. **Exclusion criteria:** Patients detected to have cancers by colonoscopy in 2004 (44 cases). **Inclusion criteria:** Patients with negative colonoscopy in 2004 with CRC from 2005 to 2009 were included (n=803).

Results Four patients with negative colonoscopy in 2004 were diagnosed with CRC between 2005 to 2009.

Case 1: M78 with diverticular disease in 2004 and iron deficiency anaemia 2005. OGD showed pyloric ulcer. Colonoscopy deferred as negative 1 year ago. In 2006 found to have **caecal cancer.**

Case 2: M43 known IBD, on surveillance with negative colonoscopy in 2004 had **low rectal cancer** in 2005.

Case 3: M66 had four adenomas (ascending colon, hepatic flexure, splenic flexure and 20 cm from anal verge) removed in July 2004. **Rectal Malignancy** detected in 2005.

Case 4: F76 incomplete colonoscopy in 2004 due to a tight sigmoid diverticular stricture, developed **sigmoid cancer**in 2008.

4 PCCRCs (1 Caecal, 1 Sigmiod, 2 Rectal) detected out of 803 patients in an interval of 5 years with a miss rate of 0.49% over 5 years. Three were males. Age range 43–78 years.

Conclusion What is known: Previous studies[1] have shown that female sex diverticular disease, older age,[2 3] right sided cancers[1–5] IBD, incomplete colonoscopy[2 3] are all risk factors for missed CRCs. **What this study found:** 3 out of 4 missed cancers were in males and 3 out of 4 were left sided cancers, two of them in rectum. Our miss rate was 4/803 that is 0.49% compared to an average of 5% in other studies[1–6] and similar to the miss rate in the National Polyp study. **What this study adds:** Diligent examination of the rectum