

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. Sensitivity, 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<sup>1</sup> 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 variability (number 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.<sup>2–5</sup> 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, 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	<b>Definitely caecum</b>	<b>246</b>	<b>26</b>
3	<b>Likely caecum</b>	<b>208</b>	<b>22</b>
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 Sigmoid, 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<sup>1</sup> have shown that female sex, diverticular disease, older age,<sup>2,3</sup> right sided cancers<sup>1–5</sup> IBD, incomplete colonoscopy<sup>2,3</sup> 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<sup>1–6</sup> and similar to the miss rate in the National Polyp study. **What this study adds:** Diligent examination of the rectum