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 diverticulosis (56%), 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 85%, PPV 44%, NPV 85%), BLEED (sensitivity 67%, specificity 44%, PPV 28%, NPV 51%) and SIGN (sensitivity 100%, specificity 3%, PPV 28%, 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 0.35) 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.  

### References

6. Rex DK. Indiana USA: Division of Gastroenterology/Hepatology, Indiana University School of Medicine.

**PMO-205**  
**PHOTOGRAPHIC CONFIRMATION OF COMPLETE COLONOSCOPY**

**C Subbiah Somasundaram,** D Ramanaden, I Finnie, A Baghomian, Ysbyty Glan Clwyd, Rhyl, UK

**Introduction** Establishing intubation of caecum is an important aspect of quality indicator1 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 SFR) 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:

<table>
<thead>
<tr>
<th>Score</th>
<th>Description of score</th>
<th>Number of photos</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not known</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Definitely caecum</td>
<td>246</td>
<td>26</td>
</tr>
<tr>
<td>3</td>
<td>Likely caecum</td>
<td>208</td>
<td>22</td>
</tr>
<tr>
<td>4</td>
<td>Maybe caecum</td>
<td>212</td>
<td>22</td>
</tr>
<tr>
<td>5</td>
<td>Unlikely caecum</td>
<td>147</td>
<td>16</td>
</tr>
<tr>
<td>6</td>
<td>Not caecum</td>
<td>135</td>
<td>14</td>
</tr>
</tbody>
</table>

**Abstract PMO-205 Table 1**

**Competing interests** None declared.

**PMO-206**  
**POST COLONOSCOPY CANCERS IN 5-YEAR INTERVAL**

**C Subbiah Somasundaram,** D Ramanaden, I Finnie, A Baghomian, Ysbyty Glan Clwyd, Rhyl, UK

**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 studies1 have shown that female sex diverticular disease, older age,2,3 right sided cancers1,5 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 studies1,6 and similar to the miss rate in the National Polyp study. What this study adds: Diligent examination of the rectum...
is important; particularly in IBD patients on surveillance. It is important to retrofit in rectum to inspect the anal verge. Left sided cancers comprised the major part of missed cancers.

Competing interests None declared.

REFERENCES


PMO-208

DOUBLE BALLOON ENTEROSCOPY IN A DISTRICT GENERAL HOSPITAL: THE EXPERIENCE SO FAR
doi:10.1136/gutjnl-2012-302514b.208

C Parker, R Perowne, O Nylander, S Panter. South Tyneside District Hospital, South Shields, UK; South Tyneside Hospital, South Shields, UK; Sunderland Royal Hospital, Sunderland, UK

Introduction Double Balloon Enteroscopy (DBE) is widely used in clinical practice worldwide and can be used to explore the small bowel in an antegrade or retrograde approach. A DBE service at South Tyneside District Hospital was commenced in January 2010 to complement the existing capsule endoscopy service.

Methods Patient records were examined retrospectively for all DBE’s performed at South Tyneside District Hospital between January 2010 and January 2012. Information recorded included: indication for procedure, route of procedure, average depth of insertion, findings of procedure, therapy performed, sedation used and complications.

Results A total of 37 procedures (17 (46%) in first 12 months, 20 (54%) in 2nd) were performed: 17 anal, 1 via ileostomy, 19 oral. 81% were done under sedation using a combination of midazolam and pethidine (average doses 4.7 mg midazolam, 62 μg pethidine), 19% were performed under GA. Average depth of insertion for all procedures was 197 cm for oral DBE and 81 cm for anal DBE. Average depth for year 1: 204 cm oral, 69 cm anal. Average depth of insertion for year 2: 190 cm oral, 93 cm anal. Indications: Suspected GI bleeding 50%, definite or suspected Crohns 46%, neoplasia, 10.5%, abnormal imaging 10.5%, symptoms/signs only 3%. See Abstract PMO-208 table 1. DBE Findings: Diagnostic yield: 50% for occult GI bleeding, 46% for suspected or definite Crohns with an overall change in management (or can explain symptoms) in 37%. See Abstract PMO-208 table 2. Overall biopsies were taken in 43% (37% year 1, 47% year 2). Therapy was performed in 9% (1 Crohn’s stricture dilatation, 2 Peutz Jeghers polypectomies). There have been no complications.

Conclusion Our DBE service appears safe. In the second 12 months there were deeper depths of insertion for the anal approach suggesting the “learning curve” is greatest for this approach. Increasing amounts of therapy and tattoos are being performed as experience is increasing. A recently published systematic review of DBE1 found the main indication for referral for DBE to be GI bleeding (60%), interestingly our results show a different picture in variceal cases. Admissions overall for GI bleeding have increased mainly due to a significant rise in LGIB mainly accounted for by IBD, haemorrhoids and ischaemic colitis.

Competing interests None declared.

Abstract PMO-208 Table 1

<table>
<thead>
<tr>
<th>DBE indication</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>GI bleeding</td>
<td>50</td>
</tr>
<tr>
<td>Crohn’s disease</td>
<td>46</td>
</tr>
<tr>
<td>Neoplasia</td>
<td>10.5</td>
</tr>
<tr>
<td>Abnormal imaging</td>
<td>10.5</td>
</tr>
<tr>
<td>Symptoms/signs</td>
<td>3</td>
</tr>
</tbody>
</table>

Abstract PMO-208 Table 2

<table>
<thead>
<tr>
<th>DBE findings</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflammatory</td>
<td>27</td>
</tr>
<tr>
<td>Vascular</td>
<td>2</td>
</tr>
<tr>
<td>Neoplastic</td>
<td>9</td>
</tr>
<tr>
<td>Normal</td>
<td>62</td>
</tr>
</tbody>
</table>

C Smith, J M Thomson, A Fraser, B Vijayan, J S Leeds. Gastroenterology, Aberdeen Royal Infirmary, Aberdeen, UK

Introduction Acute gastrointestinal (GI) bleeding is a common medical emergency associated with significant mortality and morbidity. Recent studies suggest that the incidence of upper GI bleeding (UGIB) has decreased mainly due to reduction in peptic ulcer disease. Trends for lower GI bleeding (LGIB) are less well defined and therefore the burden on health services is unknown. The aim of this study was to examine the trends in all types of GI bleeding presenting to our bleeding unit over a 13-year period.

Methods Our Gastrointestinal Bleeding Unit opened in October 1991 and serves a population of around 600 000. The unit admits fi

to the unit over the period October 1991 and 1991 and serves a population of around 600 000. The unit admits fi

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