OC-047 CORRELATION OF CAECAL INTUBATION RATE TO VOLUME – COLONOSCOPISTS SHOULD UNDERTAKE AT LEAST 120 PROCEDURES PER YEAR

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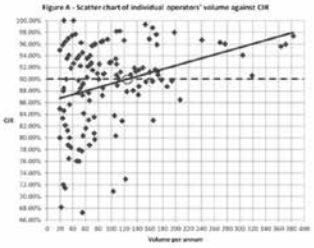
Introduction Quality assurance of colonoscopy is a central theme in endoscopic provision. In the UK the Joint Advisory Group on Gastrointestinal endoscopy (JAG), has issued guidance for caecal intubation rates (CIR) of 90% or higher on an intention-to-colonoscope basis. They also advise that practitioners should undertake at least 100 colonoscopies per annum. We looked at the correlation between volume per annum and CIR to test JAG's standard.

Methods We analysed 129 operator records who undertook between 20–399 colonoscopies per annum. This amounted to 12 594 colonoscopies undertaken over a two year period (2008–9) across 6 hospitals in 3 regions. Each operator's volume per annum was plotted against CIR. This was done as individual operators and also when individuals were grouped with others performing a similar volume of colonoscopy per annum (groups of 50). An additional analysis of operators undertaking 20–199 colonoscopies per annum looked at groups of 20 and groups of 10.

Results Figure A shows a scatter plot of individuals' volume (per annum) against CIR, the trend-line crosses the 90% CIR standard at 125 procedures per annum. The 3 other scatter plots of individuals grouped with others undertaking a similar volume per annum (groups of 50, 20 and 10) plotted against CIR, the trend-line crosses the 90% CIR standard at 110–120 procedures per annum.



Abstract OC-047 Figure

Conclusion The analysis of 12 594 colonoscopies, performed by 129 operators, carrying out between 20–399 colonoscopies per annum, suggest that to meet a minimum CIR standard of 90% at least 120 colonoscopies should be performed per annum. This is equivalent to performing 3 colonoscopies per week. We recommend advisory bodies on quality standards adopt this minimum activity threshold into their guidance.

Disclosure of Interest None Declared

BSG trainees symposium: making your training work for you

OC-048 COLONOSCOPY: WHAT IS THE NUMBER REQUIRED TO MAINTAIN COMPETENCY? – A RETROSPECTIVE AUDIT

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Introduction There has been increasing demand for gastroenterologist to maintain JAG competencies year on year.[1] However there are few studies into the adequate number required despite the bowel cancer screening programme suggesting > 100 per annum. The study aims to compare competencies standards in relation to the number of colonoscopies performed in a year.

Methods Data was collected retrospectively within the trust between 1/12/2010 and 30/11/2011. These include colonoscopies performed in the 3 main hospitals within the UHMBT – Royal Lancaster Infirmary, Furness General Hospital and Westmoreland General Hospital. A total of 2502 colonoscopies performed were retrieved. The endoscopy reporting system 'Endobase' and 'Indigo 4 Review' were used to retrieve endoscopy report and pathology report respectively. The caecal intubation rate (completion rate), polyp detection rate, adenoma detection rate, adequacy of bowel prep and sedation rate were set standards. Chi squared test for correlation was used to compare all standards. Two groups were formed to compare the set standards as colonoscopist who performed > 100 colonoscopies per annum (pa) and those who performed < 100 colonoscopies pa. Withdrawal time, polyp recovery and complication rates were not included in this audit.

Results Of the 2502 colonoscopies performed, 633 were performed by colonoscopist who performed < 100, 1869 colonoscopies were performed by colonoscopist who performed > 100 colonoscopies. Completion rate for < 100 colonscopies was 85.62% and > 100 colonoscopies was 92.24% ($p < 0.0001$). Polyp detection rate (PDR) for <100 colonscopies was 17.85% and > 100 colonoscopies was 30.34% ($p < 0.0001$). Adenoma detection rate for < 100 colonoscopies was 25.28% and > 100 colonoscopies was 32.98% ($p = 0.0003$). Comparison of completion rates between both good and satisfactory bowel prep was 91.27% against poor prep 81.25% ($p < 0.001$). Reasons for non completion in order of frequency were patient discomfort, excess looping, pathology encountered limiting progression, inadequate bowel preparation, tight stricture and instrument inadequacy. For sedation, the number of times pethidine given > 50 mg was 0.15% and number of times midazolam given > 5 mg was 0.05%.

Conclusion Performing at least 100 colonoscopies a year statistically improves completion rate, polyp detection rate and adenoma detection rate. Good and satisfactory bowel prep statistically improves completion rate. This audit supports the JAG recommendation that a colonoscopist should perform > 100 colonoscopies per annum to maintain competency.

Disclosure of Interest None Declared

REFERENCE

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OC-049 ARE ENDOSCOPIC EXAMINATIONS PERFORMED BY TRAINEE ENDOSCOPISTS LESS TOLERABLE THAN THOSE CONDUCTED BY SENIOR COLLEAGUES?

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Introduction Endoscopic training for gastroenterology trainees is an integral part of specialty training, with defined competencies required prior to independent practise. Whilst training of future endoscopists is essential to meet the future demands of endoscopy, previous studies have suggested that tolerability and patient satisfaction is decreased when trainees undertake endoscopic examinations. This study evaluates the influence trainees may have on endoscopic tolerability with 3 outcome measures assessed: procedural pain, discomfort and distress.

Methods Consecutive patients attending a tertiary referral centre and undergoing clinically indicated oesophogastroduodenoscopy (OGD) and colonoscopy were prospectively recruited between September 2011 and June 2012. Outcomes measures were assessed using a validated 10-point numeric rating scale (NRS) from 0 (no pain) to 10 (worst pain imaginable), with scores ≥5 considered to be elevated. Details of staff member(s) undertaking endoscopic examinations were recorded, with procedures considered to have trainee involvement if a trainee had performed all or part of the procedure. Chi squared analysis was then used to determine if trainee involvement influenced outcome measures.

Results 610 patients were recruited (280 male, median age 56 years, range 17–90 years). Whilst no significant differences were identified for pain, discomfort or distress during colonoscopy, significant differences were identified in procedural discomfort and distress ($p = 0.015$ and $p = 0.033$ respectively) when trainees undertook OGD's, with procedural pain approaching significance ($p = 0.061$, Table 1).

Conclusion This is the first study to discriminate pain, distress and discomfort as tolerability outcome measures. Whilst trainee involvement during OGD negatively influenced all 3 outcome measures, no significant effect was observed during colonoscopy. This finding may reflect OGD's frequently being the first endoscopic procedure taught to trainees and the difficulties of oesophageal intubation.

Disclosure of Interest None Declared

Abstract OC-049 Table 1 Comparisons in tolerability between trainees and non-trainee performed procedures.

	No Trainee n (%)	Trainee n(%)	P value
Colonoscopy (n = 304)			
Elevated Pain	87 (27%)	68 (22%)	0.382
Elevated Discomfort	92 (30%)	76 (25%)	0.136
Elevated Distress	56 (18%)	52 (17%)	0.078
OGD (n = 306)			
Elevated Pain	18 (6%)	46 (15%)	0.061
Elevated Discomfort	44 (14%)	98 (32%)	**0.015**
Elevated Distress	43 (14%)	93 (30%)	**0.033**

IBD symposium: towards personalised treatment

OC-050 5-AMINOSALICYLATE (5-ASA) INDUCED NEPHROTOXICITY IN INFLAMMATORY BOWEL DISEASE

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Introduction Nephrotoxicity is a rare idiosyncratic reaction to 5-ASA therapy. The precise pathogenic mechanisms are unknown. This study aims to a) describe the clinical features of this rare complication b) explore underlying mechanisms and c) identify clinically useful predictive genetic markers so these drugs can be avoided, or monitoring intensified, in high-risk patients. Here we report the clinical features.

Methods Patients were identified and recruited from 185 sites (130 UK). Inclusion criteria included normal renal function prior to commencing 5-ASA, ≥50% rise in creatinine after starting 5-ASA and medical opinion implicating 5-ASA justified drug withdrawal. An adjudication panel assessed causality from case report forms using the validated Liverpool Adverse Drug Reaction Causality Assessment Tool.

Results 154 patients were recruited. 19 patients were excluded following adjudication. The cohort included patients with Crohn's disease, ulcerative colitis and indeterminate colitis (42%, 55%, 4% respectively). 74% of cases were male. Nephrotoxicity was seen with all aminosalicylates including 1 patient treated with topical therapy only. Nephrotoxicity occurred at a median age of 36.5 yrs (range 15.4–88.4 yrs). Two patients had a confirmed family history of 5-ASA-induced nephrotoxicity. 78% were detected by routine blood monitoring. Only 45% of cases recovered completely after drug withdrawal, with 18 requiring renal replacement therapy (14 transplantation). The median time for peak creatinine after commencing 5-ASA was 3.5 yrs (range 0.16–43.4 yrs). There was no evidence that time on 5-ASA treatment was associated with a higher peak creatinine or the likelihood of full recovery ($p = 0.87$). Women were more likely to reach full recovery than men ($p = 0.00148$; OR 8.26; CI 2.46–34.94). There was no evidence that early withdrawal of 5-ASA led to a higher likelihood of complete recovery. There was no difference in recovery between the three disease groups on logistic regression analysis.

Conclusion This is the largest and most detailed study of 5-ASA induced nephrotoxicity to date. Whilst the incidence is low, the morbidity is high with 13% of patients requiring renal replacement therapy and 55% of patients failing to return to a normal creatinine after 5-ASA withdrawal. The next step is to carry forward these patients to a genome-wide association analysis, to be performed in February 2013.

Disclosure of Interest None Declared

Oesophageal symposium: early oesophageal neoplasia

OC-051 PATIENTS UNDERGOING RADIOFREQUENCY ABLATION (RFA) FOR BARRETT'S RELATED NEOPLASIA HAVE IMPROVED OUTCOMES WITH DECREASING LENGHTHS OF BASELINE BARRETT'S OESOPHAGUS (BE) & INCREASING NUMBER OF RFA SESSIONS

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Introduction BE is the pre-cursor to oesophageal adenocarcinoma (OAC). High grade dysplasia (HGD) & early mucosal neoplasia in BE have a 40–60% risk of progressing to OAC. Endoscopic mucosal resection (EMR) & RFA are alternatives to surgery for curative treatment of these patients. We present prospective data from 19 centres in the UK HALO RFA registry.

Methods Before RFA, superficial lesions were removed by EMR. Patients then underwent RFA 3 monthly until all BE was ablated or cancer developed (endpoints). Biopsies were taken at 12 months for Primary outcomes (clearance for HGD (CR-HGD), all dysplasia (CR-D) & BE (CR-BE)).