

Abstract PWE-027 Table 1

	Number of colonoscopies	Reached caecum/TI/anastomosis	Incomplete	CIR	95% CI
Female	3886	3532	354	90.89%	89.94–91.76
Male	4438	4219	219	95.07%	94.39–95.66
Total	8324	7751	573	93.12%	92.55–93.64

Conclusion The data reveals significant differences in CIR between female and male patients (90.89 vs. 95.07%, $p < 0.0001$, NNH 24). Analysis of the reasons recorded for failure shows a strong trend in males for poor bowel preparation and obstructing lesion. In females, a strong trend was shown for pain/intolerance, diverticular disease and withdrawal of consent. Statistical significance was shown for previous (abdominal) surgery and tight bend. Looping is a common reason for failing colonoscopy with no gender difference.

This is an important observation that females are significantly less likely to have complete colonoscopy. Perhaps endoscopy units should outline the potential for missed lesions as a consequence when consenting female patients – in particular those with known diverticular disease or previous abdominal surgery. Other reasons of failure could also be addressed e.g. higher doses of analgesia for females as required.

REFERENCES

- VermaAM, McGrath N, Dixon A, Chilton AP. Gender differences: analysis of 5162 colonoscopies over 4 years reveals higher caecal intubation rates in male patients. *Gut* 2012;61:Suppl 2 A150-A151
- Church JM. Complete colonoscopy: How often? And if not, why not? *Am J Gastroenterol* 1994;89:556–60.
- Saunders BP, Fukumoto M, Halligan S, et al. Why is colonoscopy more difficult in women? *Gastrointestinal Endoscopy* 1996;43:124–6.

Disclosure of Interest None Declared.

PWE-028 PATIENT COMFORT AND SEDATION AND ANALGESIC PRACTICES DURING COLONOSCOPY IN THE ENGLISH BOWEL CANCER SCREENING PROGRAMME

A Ball*, SA Riley. *Gastroenterology, Sheffield Teaching Hospitals, Sheffield, UK*

10.1136/gutjnl-2014-307263.288

Introduction Colonoscopy frequently causes discomfort and a range of medications are used to improve the patient experience. The relationship between medication use and patient comfort, however, is complex and subject to a number of potential biases. We sought to describe the relationship between patient comfort and medication use within the English Bowel Cancer Screening Programme (BCSP).

Methods Procedural information for colonoscopy examinations performed within the English BCSP is prospectively entered into a national database. Comfort is independently rated by a specialist screening practitioner (SSP) using the Modified Gloucester Comfort Scale (no, minimal, mild, moderate and severe). We studied significant patient discomfort (moderate or severe) and medication usage for colonoscopists performing over 100 examinations between January 2010 and December 2012. Comparisons were made using the χ^2 test and correlations were analysed using Spearman rank correlation coefficient.

Results During the period of the study 113,316 examinations were performed by 290 endoscopists. Significant discomfort occurred during 8.9% of colonoscopy examinations but there was variation between individual colonoscopists (median 8.1%,

IQR 5.0–12.6%, range 0.8–23.9%). Significant discomfort was more common in females (12.7 vs. 6.1%, odds ratio (OR) 2.24), patients with diverticulosis (11.8% vs. 8.7%, OR 1.34), incomplete examinations (37.3 vs. 7.9%, OR 6.8), inadequate bowel preparation (13.5 vs. 9.6%, OR 1.4) and screening rather than surveillance colonoscopies (9.1 vs. 7.4%, OR 1.24).

Midazolam was administered during 87.8% and opiate analgesia during 87.3% of procedures. There was wide variation between colonoscopists in the proportion of examinations in which midazolam (median use 95.1%, IQR 81.8–97.8%, range 4.1%–100%) and opiate analgesia (median use 97.3, IQR 85.0–99.2%, range 5.6–100%) were used. Reversal agents were rarely used (8 in 10,000). Entonox was administered during 7.5% of examinations but most who administered it did so in a minority of their procedures (median use 0.7%, IQR 0–8.2%, range 0–98.9%). 4.7% of patients underwent medication-free colonoscopy. General anaesthesia was rarely used (0.5%).

There were no significant correlations between the amount or proportion of medication used by colonoscopists and the comfort of their patients.

Conclusion Most colonoscopy examinations were performed without causing significant discomfort. Although most colonoscopists used intravenous medication those who used less medication were no more likely to cause significant discomfort. Appropriate use of medication to achieve comfortable procedures while minimising risk and inconvenience remains an important focus for future research.

Disclosure of Interest None Declared.

PWE-029 POSITION CHANGES AMONG ENGLISH BCSP COLONOSCOPISTS: A SURVEY OF PRACTICES

A Ball*, J Campbell, SA Riley. *Gastroenterology, Sheffield Teaching Hospitals, Sheffield, UK*

10.1136/gutjnl-2014-307263.289

Introduction Studies suggest that modifying a patient's position during colonoscopy withdrawal may improve luminal distension and polyp detection. It is unclear whether this practice is widely adopted by endoscopists.

Methods Colonoscopists within the English Bowel Cancer Screening Programme (BCSP) were invited to participate in a web-based survey assessing the use of position change during colonoscopy withdrawal. Free text responses were assessed using thematic analysis.

Results The survey was completed by 204/298 (68%) of English BCSP colonoscopists. 64.7% of respondents indicated that they almost always change a patient's position, 16.7% usually, 13.7% sometimes, 3.4% occasionally and 1.5% rarely do so.

77% of those who almost always or usually changed a patient's position did so as part of their routine, but 75.3% were less likely to change position in those with poor mobility and 75.3% would not change position if luminal distension was adequate. 93% of these respondents most often positioned

Abstract PWE-029 Table 1 Patient position most often used by endoscopists who almost always or usually change position and those who sometimes, occasionally or rarely change position

Position change usage	Segment	Right lateral	Supine	Left lateral	In which ever position they arrive
Almost always or usually	Caecum to hepatic flexure	7.8%	25.3%	60.2%	7.8%
	Transverse colon	1.2%	93.4%	5.4%	0.6%
	Splenic flexure and descending colon	51.2%	34.4%	11.4%	3.6%
Sometimes, occasionally or rarely	Caecum to hepatic flexure	0%	31.6%	34.2%	34.2%
	Transverse colon	0%	34.2%	28.9%	36.8%
	Splenic flexure and descending colon	7.9%	31.6%	26.3%	34.2%

patients supine while examining the transverse colon and nearly half examined the right and descending colon in a sub-optimal position (Table 1).

Of those respondents who sometimes, occasionally or rarely changed a patient's position, 42% were unconvinced that routine position change was beneficial. A further 21.1% felt it took too long, 7.8% felt it was inconvenient for the patient and 7.8% felt it was inconvenient for the endoscopist. These respondents were most likely to examine segments without changing patient position.

Free text responses revealed that some endoscopists position patients differently during insertion and withdrawal and also use position change to optimise access during therapy.

Conclusion Most BCSP colonoscopists change patients' position during most colonoscopy withdrawals, but the patient position is often sub-optimal. Increased awareness of the existing literature and further research assessing positioning strategy is warranted.

REFERENCE

East JE et al. *Gastrointest Endosc.* 2011 Mar;73(3):456–63

Disclosure of Interest None Declared.

PWE-030 ENTONOX USE DURING COLONOSCOPY: A SURVEY OF ENGLISH BOWEL CANCER SCREENING PROGRAMME COLONOSCOPISTS

A Ball*, J Campbell, SA Riley. *Gastroenterology, Sheffield Teaching Hospitals, Sheffield, UK*

10.1136/gutjnl-2014-307263.290

Introduction Entonox may be used to improve patient experience during colonoscopy. Nitrous oxide is rapidly eliminated which minimises after effects and inconvenience to patients. Despite its advantages, Entonox is used in only a minority of procedures in the UK. We sought to understand the reasons for its low utilisation.

Methods Colonoscopists within the English Bowel Cancer Screening Programme (BCSP) were invited to participate in a web-based survey, assessing the availability, current practices and perceptions of Entonox during colonoscopy. Respondents were able to select pre-defined answers or offer written responses. Free text responses were assessed using thematic analysis. Categorical data was compared using the χ^2 test.

Results The survey was completed by 208/298 (70%) of the English BCSP colonoscopists. Entonox was available to 152/208 (73%) respondents but this varied between NHS deaneries. Nearly half (47%) of the respondents stated that Entonox was used in < 20% of examinations. Colonoscopists who administered Entonox frequently (>20% of examinations) rated its efficacy (49% vs. 76%, OR: 3.3, $p = 0.001$) and usefulness (69% vs. 95%, OR: 8.4, $p < 0.0001$) more favourably. But there were no differences in how they rated its safety (90% vs. 97%,

OR: 4.2, $p = 0.085$), frequency of side effects (92% vs. 96%, OR: 2.3, $p = 0.31$) or influence on discharge time (70.4 vs. 79.5%, OR: 1.63, $p = 0.26$). Most respondents for whom nitrous oxide was available stated that they would use it if they were to have a colonoscopy themselves (74%).

Most respondents reported their patients were advised to use Entonox 'as required' (92%) rather than continuously (8%) and from the start of colonoscopy rather than as rescue medication when other medications are inadequate. Some respondents never combined Entonox with other sedatives. Many respondents indicated that Entonox was used for the patients and the procedures which are expected to have least discomfort.

Most of the colonoscopists for whom Entonox wasn't available had considered introducing it (94%). Practical difficulties (37%) and satisfaction with current analgesics and sedation (28%) were the most common reasons it was not available. The introduction of the English flexible sigmoidoscopy screening programme was cited as the reason for its introduction by several respondents.

Conclusion Entonox is used in a minority of colonoscopy examination. It is generally perceived to be safe, effective and most colonoscopists would use it if they required a colonoscopy. Entonox is often chosen when patients wish to avoid the inconvenience caused by intravenous sedation and analgesics. Its use is likely to increase with the introduction of the English screening programme.

Disclosure of Interest None Declared.

PWE-031 IS FACE-TO-FACE PRE-ASSESSMENT PRIOR TO COLONOSCOPY USEFUL?

¹A Rothnie*, ¹H Padmanabhan, ¹A Higgins, ¹A Grewal, ¹K Arndtz, ²A Nevill, ¹R Mathew. ¹Mid Staffordshire NHS Trust, Stafford, UK; ²University of Wolverhampton, Wolverhampton, UK

10.1136/gutjnl-2014-307263.291

Introduction In 2009, the NPSA issued a report alerting health-care providers to the potential risk of harm from using oral bowel cleansing agents (OBCA). Recently published consensus guidelines recommend pre-assessing patients undergoing colonoscopy before the use of OBCA. First, to determine whether pre-assessment improved the quality of bowel preparation for patients undergoing colonoscopy at our unit. Secondly whether pre-assessment helps to prevent deterioration in renal function in CKD patients. Thirdly, to define risk stratifying criteria for poor bowel preparation and use these to deploy resources to patients who are most at risk of poor bowel preparation.

Methods Data was collected prospectively over of 12 months. Patients were stratified to one of three risk groups based on the presence of risk factors for poor bowel preparation taking 'at risk' medication and those with significant co-morbidities. Group 1 patients had no risk factors and group 3 consisted of patients