

evaluated was gender. The outcomes measured at surveillance were detection of CRC, AA, non-advanced adenoma (NAA) and normal finding. Any location proximal to splenic flexure was considered as proximal location for this study.

There were 43 (0.6%) subjects with CRC, 786 (11.2%) with AA, 5566 (79.3%) with NAA and 620 (8.8%) subjects with normal findings during first surveillance. The result of the multivariate analysis was summarised in the table below.

Table 1 showing significant result of multivariate analysis:

Conclusion In contrast with current guidelines, the size of adenomas failed to achieve statistical significance. The number of adenomas, male gender and any proximal location at screening were the important predictors of advanced adenoma during surveillance (table). Future adjustments in the risk stratification strategy for screening population could incorporate these predictors to identify high and low risk cohorts more accurately at screening.

REFERENCE

- 1 Guidelines for colorectal cancer screening and surveillance in moderate and high risk groups (update from 2002), *Gut* 2010;59:666–690

Disclosure of Interest None Declared.

OC-045

REDUCED RISK OF EMERGENCY ADMISSION FOR COLORECTAL CANCER ASSOCIATED WITH INTRODUCTION OF BOWEL CANCER SCREENING ACROSS ENGLAND: RETROSPECTIVE NATIONAL COHORT STUDY

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10.1136/gutjnl-2014-307263.45

Introduction We examined whether roll out of the bowel cancer screening programme (BCSP) across England was associated with a reduced risk of emergency hospital admission for people presenting with colorectal cancer (CRC) during this period.

Methods Design: Retrospective cohort study of 27,763 incident cases of CRC over a 1-year period during the roll-out of screening across parts of England. Primary outcome: Emergency (unplanned) hospital admission during diagnostic pathway. Primary exposure: Living in an area where BCSP was active at the time of diagnosis. Patients were categorised into three exposure groups: BCSP not active (reference group), active <6 months or active ≥6 months. To explore confounding we studied risk of emergency admission for cases of oesophagogastric cancer using the same design.

Results Risk of emergency admission for CRC in England was associated with increasing age, female gender, co-morbidity and social deprivation. After adjusting for these factors in logistic regression, the odds ratio for emergency admission in patients diagnosed ≥6 months after start-up of local screening was 0.83 (CI: 0.76–0.90). The magnitude of risk reduction was greatest for cases of screening age (OR 0.75; CI: 0.63–0.90) but this effect was apparent also for cases outside the 60–69 year age-group (OR 0.85; CI: 0.77–0.94). Living in an area with active BCSP conferred no reduction in risk of emergency admission for people diagnosed with oesophagogastric cancer during the same period.

Conclusion The start-up of bowel cancer screening in England was associated with a substantial reduction in risk of

emergency admission for CRC in people of all ages. This suggests that the roll-out of the programme had early and indirect benefits beyond those related directly to participation in screening.

Disclosure of Interest J. Geraghty Grant/research support from: Cook Medical, M. Shawihdi: None Declared, E. Thompson: None Declared, S. Sarkar: None Declared, M. Pearson: None Declared, K. Bodger: None Declared.

OC-046

DO PATIENTS WITH A PREVIOUS NORMAL COLONOSCOPY WITHIN THE UNITED KINGDOM BOWEL CANCER SCREENING PROGRAM WHO SUBSEQUENTLY HAVE A POSITIVE FOBT REQUIRE REPEAT COLONOSCOPY?

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10.1136/gutjnl-2014-307263.46

Introduction Patients within the UK Bowel Cancer Screening Programme (BCSP) who have a normal colonoscopy are re-invited for Faecal Occult Blood test (FOBT) on a 2-yearly interval. If FOBT is positive, they are invited to have a repeat colonoscopy.

The general polyp ‘miss rate’ is up to 22% in colonoscopy. Factors contributing to this include poor bowel preparation, rapid withdrawal time and endoscopist inexperience. However, endoscopists within the BCSP are highly skilled and selected following a rigid assessment process and poor bowel preparation is rare. Therefore, we hypothesised that patients who have previously had a normal colonoscopy within the BCSP who subsequently have a positive FOBT are unlikely to have a high-risk polyp or bowel cancer. Excluding these patients may avoid unnecessary invasive investigations and reduce the burden on an ever-stretching BCSP waiting list.

We aimed to assess the detection of pathology in patients who have had a previous normal colonoscopy within the BCSP who subsequently have a positive FOBT and attend for repeat colonoscopy.

Methods Patients with a previous normal colonoscopy between 2007–2010 who re-attended within the BCSP for colonoscopy after repeat positive FOBT were identified from the UCLH ‘in-house’ BCSP database. The results of the colonoscopy and outcomes were then scrutinised.

Results A total of 1137 patients have had a normal colonoscopy to date within the BCSP and have subsequently been invited to have a repeat FOBT in 2 years time. From the patients who decided to participate in the second round of recruitment, 77 (6.7%) tested positive on FOBT and were invited for repeat colonoscopy. 8 declined another procedure. 6 patients (8%) had low risk adenomas (range 3–6 mm in size, 4 in right colon, 1 in sigmoid and 1 in left colon), all of who were discharged back to 2-yearly FOBT. 3 patients (4%) had hyperplastic polyps, 2 (3%) had inflammatory bowel disease and 58 (85%) had normal examinations. No patients had bowel cancer identified on repeat colonoscopy.

Conclusion No cases of bowel cancer were detected in FOBT positive patients who have previously undergone a normal colonoscopy within the BCSP. Only 8% of patients undergoing repeat colonoscopy had a low-risk adenoma detected mainly from the right colon. Discharging patients with a normal colonoscopy in the BCSP from further screening would reduce pressure on endoscopy screening units and any potential morbidity

associated with the procedure. From this study, excluding such patients could have avoided 20 colonoscopy screening lists (approximately 80 procedures) over 3 years in our unit. If findings are similar in other centres, current national guidelines should be changed.

Disclosure of Interest None Declared.

OC-047 ADENOMA SURVEILLANCE IN THE NATIONAL NHS BOWEL CANCER SCREENING PROGRAMME – IS THE HIGH/INTERMEDIATE RISK STRATIFICATION APPROPRIATE?

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10.1136/gutjnl-2014-307263.47

Introduction The NHS Bowel Cancer Screening Programme (BCSP) guidelines advocate surveillance of high and intermediate risk subjects with adenomas, due to the risk of developing future advanced neoplastic lesions. This study aims to evaluate and compare the yield of colorectal neoplasia during first surveillance in NHS BCSP among these two cohorts.

Methods Data on each patient entering the NHS BCSP are contemporaneously recorded on the national BCSP database (BCSS). BCSS was interrogated to identify all high-risk (HR) and intermediate-risk (IR) subjects at screening who completed their first surveillance episodes during the period of June 2006 to July 2012. Participants with histology data available at surveillance were included. The data were then analysed to assess the detection of colorectal cancer (CRC), advanced adenoma (size ≥ 10 mm/ $> 25\%$ villous histology/ high grade dysplasia) and non-advanced adenoma in the two groups. Chi-square tests were performed to determine significance of difference in proportions among them.

Results Table showing subjects with different pathologies at first surveillance:

During the study period 5579 HR and 4723 IR subjects completed their first surveillance procedures, of which 5118 HR and 4569 IR subjects had their histology results available, and were included for final analysis. 39 (0.76%) HR and 20 (0.47%) IR subjects were diagnosed with colorectal cancer (CRC). Detection of CRC and colorectal adenomas during the first surveillance were significantly higher in HR group (table).

Conclusion Only a small number of subjects had CRC during their first surveillance, indicating that the current surveillance intervals for HR and IR groups are safe. The higher yield of all colorectal neoplasia (CRC, AA and NAA) during the first surveillance in HR subjects illustrates that the current risk stratification is valid and justified. The finding of significant

Abstract OC-047 Table 1

Risk category and p values	CRC N (%)	Advanced adenoma (AA) N (%)	Non-advanced adenoma (NAA) N (%)	Others N (%)	Total N
High risk (HR)	39 (0.76)	739 (14.44)	2184 (42.67)	2156 (42.13)	5118
Intermediate risk (IR)	20 (0.47)	385 (8.42)	1393 (30.48)	2771 (60.63)	4569
Chi-square p value	0.04	<0.001	<0.001	<0.001	

and higher proportion of IR subjects with non-neoplastic findings during first surveillance suggests that, they have less potential to develop colorectal neoplasia and further study needed to evaluate whether their surveillance interval can be safely prolonged.

REFERENCE

- 1 Guidelines for colorectal cancer screening and surveillance in moderate and high risk groups (update from 2002). *Gut* 2010;59:666–690

Disclosure of Interest None Declared.

OC-048 TRANS-ANAL SUBMUCOSAL ENDOSCOPIC RESECTION (TASER): A NEW ENDO-SURGICAL APPROACH TO THE RESECTION OF GIANT RECTAL LESIONS

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10.1136/gutjnl-2014-307263.48

Introduction Trans-anal surgical (TEMS/TAMIS) and advanced endoscopic resection (ESD, P-EMR) procedures have the potential to provide complete and successful eradication of giant rectal polyps. Both approaches however have limitations in terms of practicality and safety. We describe a new endo-surgery technique called Trans-Anal Submucosal Endoscopic Resection (TASER) which combines the advantages of both the endoscopic and transanal surgical approach.

Methods The GelPoint Path trans-anal access port allows simultaneous passage of an endoscope and two laparoscopic retractors. Working with the endoscopic image the laparoscopic retractors (Johen 33 mm forceps) allow dynamic tissue retraction to facilitate endoscopic dissection (Flush knife–BT) or snare placement (Olympus snare master/spiral snare). All procedures were performed under general anaesthesia and with patients in the lithotomy position.

Results Eleven patients (mean age 55 years, 3 male/8 female) underwent TASER for 11 lesions, distributed from the lower rectum to the recto-sigmoid junction and with a median size of 85 mm, range 40–180 mm. Polyp morphology was (3/11 flat (Paris 2a), 4/11 sessile (Paris 1s) and 4/11 mixed type (Paris 2a +1s). In all cases a circumferential mucosal incision was made and histology confirmed free lateral margins in all cases. 10/11 rectal polyps were adenomatous and one had a small focus of moderate differentiated adenocarcinoma (incomplete local excision).

Complete endoscopic excision in a single session was achieved in 10/11 cases (91%). Median completion time of the procedure was 215 min, range 120–480 min. Tissue retraction was used in every case and resection was completed by ESD alone (4/11), ESD + EMR (4/11) ESD + EMR + trans-anal surgical excision (3/11). Intra-procedural bleeding occurred in 8 cases, controlled with hemostatic clips and Coagrasper (Olympus); surgical suturing was required in one case (1/8). Prophylactic clips (2/11) and surgical sutures (1/11) were placed to treat deep muscle injury. There were no perforations and no delayed bleeding episodes. Patients were discharged the day following TASER in all cases. Surveillance at 3–6 months revealed no recurrence in 6 cases, whereas in four cases the follow up procedure is still pending. The malignant polyp case was referred to surgery with a good clinical outcome (T3, N0, M0).