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

- 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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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.

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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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Introduction Patients within the UK Bowel Cancer Screening Programme (BCSP) who have a normal colonoscopy are re-invited 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