Methods A prospective review of patients undergoing endoscopic resection of neoplastic polyps in the rectosigmoid colon. Patients were tertiary referrals from experienced consultants. The polyps were considered technically challenging due to size, difficult lesion access or recurrences on previous EMR scars. Referral was made prior to surgical referral. All lesions were assessed using indigo-carmine chromoendoscopy and lesions suspicious for invasive malignancy were excluded. The choice of endoscopic technique was made based on the Endoscopist's judgement of best approach for each lesion. Completeness of resection was recorded. Endoscopic follow-up was performed to assess for incomplete resection or recurrence.

Results 45 lesions were resected by ESD technique and 100 by EMR technique. For ESD procedures the median lesion size was 40 mm (range 20–150). 19/45 were salvage procedures post failed attempts at endoscopic resection. Endoscopic clearance was achieved at first attempt in 91% of the procedures. A further 7% were cleared in a subsequent procedure. One patient was referred for surgery for perforation and two patients went to surgery for unsuspected cancer found on histological examination of the resection specimen. At endoscopic follow-up 100% had complete clearance with no residual disease. There was one perforation requiring surgery, two microperforations (endoscopically managed), three delayed bleeds and two post polypectomy syndromes (conservatively managed) giving an overall complication rate of 18%. For the EMR cohort the median lesion size was 40 mm (range 20–100). All procedures were primary resections. Endoscopic clearance was achieved in 90% of cases. Two patients were referred for surgery for incomplete resection. In seven patients unsuspected cancer was found, all of whom were referred for surgery. At endoscopic follow-up 95% of cases had achieved complete clearance with no residual disease. There was seven delayed bleeds and one post polypectomy syndrome giving an overall complication rate of 8%.

Conclusion Both EMR and ESD results in an excellent complete clearance rate. While ESD appears to result in fewer recurrences at follow-up it is associated with an increased complication rate compared to EMR, predominately due to the risk of perforation. However, it is effective in patients with previous failed attempts at resection. It should be considered as an option for difficult or scarred lesions where complete clearance with EMR could be difficult.

Competing interests None declared.

OC-115 COMPARISON OF SCREEN DETECTED AND INTERVAL COLORECTAL CANCERS IN THE BOWEL CANCER SCREENING PROGRAMME: EXPERIENCE FROM THE NORTH EAST OF ENGLAND

doi:10.1136/gutjnl-2012-302514a.115

[1,2,3]M D Gill,* [2,3]M G Bramble, [2,3]C J Rees, [1,3]M Bradburn, [3,4]T J Lee, [1,3]S J Mills. *[1]Northern Colorectal Cancer Audit Group, Northern England; [2]University of Durham, Durham, UK; [3]Northern Region Endoscopy Group, Northern England; [4]University of Newcastle, Newcastle, UK*

Introduction The NHS Bowel Cancer Screening Programme (BCSP) commenced screening in North East England in February 2007. It offers biennial faecal occult blood testing (FOBt) followed by colonoscopy for those with a positive FOBt. All cases of colorectal cancer (CRC) known to the MDTs in this region are registered with the Northern Colorectal Cancer Audit Group (NORCCAG) database.

Methods CRCs occurring in the screening population (aged 60–69 years) between April 2007 and March 2010 were identified from the NORCCAG database. Their screening history was obtained by cross-referencing this database with the regional BCSP database. Cases were classified into four groups: a control group (cancers diagnosed prior to first screening invite), screen detected, interval (cancers diagnosed between screening rounds after a negative FOBt) and non-uptake (patients who declined screening). Patient demographics, tumour characteristics and survival were compared between the four groups.

Results 1336 CRCs were diagnosed in the screening population. 511 (38.2%) cancers were in the control group. 825 cancers (61.8%) were detected in individuals who had been invited for screening. 322 (39.0%) were screen detected, 311 (37.7%) were in the non-uptake group and 192 (23.3%) were interval cancers. All of the interval cancers followed a negative FOBt. Compared to both the control group and the interval cancer group, the proportion of males in the screen detected group was significantly higher (73.0% vs 62.4% & 60.4%, χ^2=9.88, p=0.002 and χ^2=8.77, p=0.003 respectively). Screen detected cancers were more likely to be left sided than in the control or interval cancer groups (78.6% vs 70.1% & 66.7%, χ^2=7.32, p=0.007 & χ^2=8.89, p=0.003). Significantly more Dukes A and fewer Dukes D cancers were found in the screen detected group compared to the control and interval groups ($p<0.05$). Screen detected cancers had a superior survival compared to interval cancers (χ^2=50.36, $p<0.001$) and the control group (χ^2=53.62, $p<0.001$). There was no difference in patient demographics, tumour location, stage of tumour nor survival between control and interval cancer groups.

Conclusion This is one of the first studies that provides data on the performance of the BCSP in one region since its national implementation. The FOB test is better at detecting cancers in the left colon and in men. There are significant numbers of interval cancers, which were not found to have an improved outcome compared to the non-screened population as has previously been published.

Competing interests None declared.

OC-116 BOWEL SCREENING WALES—FIRST ROUND REPORT

doi:10.1136/gutjnl-2012-302514a.116

H Heard.* *Bowel Screening Wales, Llantrisant, UK*

Introduction This report describes the first round of Bowel Screening Wales (BSW). It is the first overview showing the entire performance of the national bowel screening programme in Wales.

Methods The first round for BSW took place between 27 October 2008 and 24 November 2010. The Bowel Screening Information Management System obtains demographic information directly from the Welsh Demographic Service (WDS). This is the basis for the activity and outcome data presented here. This report is based on information available to BSW on the 1 August 2011.

Results A total of 847 773 invitation letters were issued to 412 025 participants. 55.2% of participants invited returned a completed test kit within six months of invitation date. Women have a higher uptake (58.8%) compared to men (51.5%). Uptake around Wales varies between areas, ranging from 49% in Wrexham and Cardiff to nearly 59% in Anglesey and Bridgend. Initially, positive rates were as expected at around 0.2% for Faecal Occult Blood (FOB) kits, rising to 0.5%. Positive rates for both test kits were 2.3% and 2.4% in early 2009, rising to 3% during 2009. Around 1% of Faecal Immunochemical Test (FIT) kits were spoilt compared to 1.8% of FOB test kits. 6807 participants with a positive test result made an assessment appointment, waiting on average around 2 weeks. 82.7% attended the appointment; the majority were by phone with only seven participants attending face to face. 5594 participants were found fit for colonoscopy and offered the procedure. 89.4% of these attended with 2.8% declining and 0.2% not attending. Waiting times for colonoscopy were on average around 10 weeks. Abstract OC-116 table 1 shows the final outcome of the 5230 colonoscopy procedures.

Abstract OC-116 Table 1 Colonoscopy outcomes

Colonoscopy outcome	FOB numbers	FIT numbers	Total numbers	FOB%	FIT%	Total%
Unknown	40	204	244	6.6	4.4	4.7
Routine recall	229	2582	2811	37.6	55.9	53.7
Surveillance—intermediate risk	119	877	996	19.5	19.0	19.0
Surveillance—high risk	70	466	536	11.5	10.1	10.2
Diagnosed with IBD	22	98	120	3.6	2.1	2.3
Diagnosed with cancer	120	294	414	19.7	6.4	7.9
Ceased (other reasons)	2	12	14	0.3	0.3	0.3
Repeat procedure needed	7	88	95	1.1	1.9	1.8
Total	609	4621	5230	100.0	100.0	100.0

Conclusion The first round of screening was very successful demonstrating a pathology yield of over 70%. BSW face ongoing challenges with interesting new developments for a maturing programme. BSW is now well placed to begin planning further age expansion and development.

Competing interests None declared.

OC-117 NEOADJUVANT PRECISION CHEMOEMBOLISATION FOR EASILY RESECTABLE COLORECTAL LIVER METASTASES

doi:10.1136/gutjnl-2012-302514a.117

R Jones,* D Dunne, S W Fenwick, P Sutton, H Malik, G Poston. *Department of Hepatobiliary Surgery, Aintree University Hospital NHS Foundation Trust, Liverpool, UK*

Introduction Peri-operative chemotherapy confers a 3-year progression free survival advantage for patients with colorectal liver metastases. Degree of post-chemotherapy tumour necrosis is associated with disease free survival. However, systemic neoadjuvant chemotherapy is associated with pathological damage to hepatic parenchyma, increasing perioperative morbidity and mortality. Irinotecan eluting beads (DEBIRI-TACE) are delivered to tumour intra-arterially, where they provide controlled & sustained delivery of Irinotecan directly to tumour, maximising response and reducing systemic exposure. This study aimed to examine the feasibility and safety of a single neoadjuvant bead embolisation 1-month before hepatectomy.
Methods Patients with easily resectable colorectal liver metastases received DEBIRI-TACE 1 month before surgery. Primary end-point was tumour resectability, Secondary end points included pathological tumour response and safety.
Results TACE attempted in 49 patients and was successful in 40. Reasons for failed TACE included arterial abnormality (n=2), progressive disease (n=2), bilobar disease (n=2), hepatoma (n=1), allergy to contrast (n=1) and concomitant infection (n=1). There was one post-TACE liver abscess (3%), and 1 post TACE pancreatitis (3%) (recognised complications). 38 patients have undergone hepatic resection so far, with R0 resection rate of 100% and no significant post-hepatectomy morbidity. Thirty day post-operative mortality was 7.6% (n=2), with neither death related to TACE (one intra-operative pneumomediastinum, one MODS after aspiration pneumonia). Complete pathological response (no viable tumour) was demonstrated in 15% of lesions, major response in 55% and minor response in 30%.
Conclusion Neoadjuvant DEBIRI TACE for resectable colorectal liver metastasis is safe and is not associated with increased post-hepatectomy morbidity. A single treatment with DEBIRI-TACE resulted in pathological response of tumour similar to that seen after systemic treatment, which may translate to improved progression free survival.

Competing interests None declared.

OC-118 EXTRAMURAL VASCULAR INVASION (EMVI) IS A BETTER PROGNOSTIC INDICATOR IN PT4 COLORECTAL CANCER THAN PATHOLOGICAL SUBTYPING INTO PT4A AND PT4B: CLINICOPATHOLOGICAL ANALYSIS OF 276 CASES

doi:10.1136/gutjnl-2012-302514a.118

R Sreekumar,* A Mirnezami, R Turck, M Bullock, T Cheung, A Bruce. *Cancer Sciences Division, Southampton general hospital, Southampton, UK*

Introduction The presence of extramural vascular invasion (EMVI) has been associated with reduced survival in colorectal cancer (CRC), and failure to consider it may account for discrepancies in outcome between similar stages. One clinically and pathologically heterogeneous subtype of CRC is T4 disease. At the microscopic level, some tumours are classed as **pT4a** due to invasion of local organs, while others are defined as **pT4b d**ue to invasion of the visceral peritoneum (based on 5th edition of TNM). The aim of the present study was to compare T4a and T4b colorectal cancers for EMVI status and longterm outcome.
Methods Pathological data on consecutive cases of T4 colorectal cancer proceeding to surgery were extracted from a prospectively collected database between 2004 and 2011. Pathological parameters analysed included macroscopic tumour details, differentiation, nodal status, and the presence of EMVI. Patient demographics, disease stage, and longterm oncological outcomes were evaluated in all cases.
Results 276 consecutive cases of T4 colorectal cancer were identified during the study period. 92% of tumours were colonic and 8% rectal. 79% of tumours were T4b, and the remainder T4a. 35% of cases were stage II disease, 43% stage III, and 22% stage IV. No difference was noted between T4a and T4b tumours for tumour differentiation, or lymph node positivity. No difference in cancer specific and disease free survival were noted between pT4a and pT4b tumours, however significantly divergent survival curves were found for EMVI positive and negative disease. The median cancer specific survival for T4a vs T4b was 32 months vs 41 months respectively (***log rank* p=*0.569***). Median disease free survival for the same cohort was 23 months vs 36 months respectively **(log rank p=0.882).** Median Cancer specific survival in patients with and without EMVI was 25 vs 60 months respectively **(log rank p. Median disease free survival was 15 months for those with EMVI, compared to 64 months in those without (log rank p.**
Conclusion Subtyping of T4 tumours by EMVI status may be a better prognostic indicator than division into T4a and T4b.

Competing interests None declared.

OC-119 MECHANISTIC RANDOMISED CONTROL TRIAL OF MESALAZINE IN SYMPTOMATIC DIVERTICULAR DISEASE

doi:10.1136/gutjnl-2012-302514a.119

[1,2]J Smith,* [2]D Humes, [1]K Garsed, [1]C Lam, [3]A Zaitoun, [4]A Bennett, [2]J Scholefield, [1]R Spiller. *[1]NIHR Biomedical Research Unit, Nottingham, UK; [2]Department of Surgery, Nottingham, UK; [3]Department of Pathology, University Hospitals Nottingham, Nottingham, UK; [4]FRAME Laboratories, University of Nottingham, Nottingham, UK*

Introduction Painful symptomatic diverticular disease (SDD) is a common but poorly understood condition. Approximately 20% of patients with diverticulosis complain of pain, but there are currently no effective treatments. We have previously reported peripheral immune activation and alteration in colonic nerve function in SDD.
Aims To test the significance of this immune activation by performing the first parallel design, double blind, randomised placebo controlled trial of an anti-inflammatory drug, mesalazine in SDD.