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

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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

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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

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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.

Abstract OC-119 Table 1 Relative quantity of inflammatory genes from SDD patients pre and post treatment with Placebo (P) or Mesalazine (M) (Median [inter-quartile range])

Median (IQR)	P group			M group		
Genes	Pre	Post	p Value	Pre	Post	p Value
NOD2	0.8938 (0.76–1.57)	1.021 (0.60–1.55)	0.6632	1.359 (0.79–1.96)	0.5925 (0.40–0.94)	**0.0002**
PAR2	1.841 (1.40–2.34)	1.571 (1.20–2.08)	0.4080	1.944 (1.49–3.37)	1.056 (0.77–1.25)	**0.0007**
TNFα	0.6611 (0.47–1.05)	0.6341 (0.34–1.15)	0.2977	0.9170 (0.61–1.40)	0.4435 (0.36–0.69)	**0.0034**
IL1B	0.7416 (0.47–1.40)	1.092 (0.37–1.49)	0.2575	0.9633 (0.37–1.96)	0.6220 (0.37–1.01)	**0.0024**
TLR4	1.377 (0.94–2.49)	1.465 (1.05–1.94)	0.3604	1.537 (1.01–1.96)	0.8932 (0.70–1.52)	**0.0479**
TLR9	0.4506 (0.34–0.73)	0.5264 (0.30–0.68)	0.4488	0.7991 (0.39–1.17)	0.4976 (0.32–0.64)	**0.0215**
MYD88	1.765 (1.51–2.66)	1.678 (1.22–2.44)	0.6013	1.780 (1.15–2.99)	1.134 (0.90–1.76)	**0.0105**

Methods Patients with confirmed SDD underwent an unprepared flexible sigmoidoscopy and biopsies at baseline and after 12 weeks treatment, completing diaries of pain and bowel habit. They were randomised to receive 3 g per day of mesalazine (M) or identical placebo (P) for 12 weeks with follow-up visits at 2 & 4 weeks. RNA from sigmoid biopsies was analysed using a custom made gene card. Gene expression and changes in symptoms were assessed between baseline and final visits using Wilcoxon signed-rank test.

Results 43 volunteers were recruited (F:M; 24:19), but 11 withdrew during the study resulting in 18 and 14 participants in the P and M groups respectively. M significantly reduced important inflammatory and pain genes including those involved in response to bacterial ligands (Abstract OC-119 table 1), changes not seen with P. M but not P significantly reduced the duration of abdominal pain (Median (range) (hrs/day) P group Pre 1.0 (0–5), Post 0.65 (0–4) p0.1919; M Group Pre 3.0 (0–20), Post 0.125 (0–5.5) p0.0413).

Conclusion This pilot study suggests that mesalazine significantly alters many of the pathways mediating immune activation by bacteria thought to contribute to pain in SDD and may provide benefit for patients. However further larger studies are required to confirm these mechanisms and efficacy of mesalazine in this group.

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Bapen symposium

OC-120 THE "NUTRITION SUPPORT PYRAMID"—COMPOSITION AND TRENDS IN A REGIONAL PAEDIATRIC COHORT FROM SOUTH EAST SCOTLAND

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Introduction Within nutrition support (NS) there is a spectrum of complexity ranging from oral supplements via enteral tube feeding (ETF) to parenteral nutrition (PN) for intestinal failure (IF). Nutrition support teams (NST) are involved with those children with chronic or complex nutrition needs on home ETF (HETF) and home PN (HPN). There is no current robust data available on the prevalence of children on each level of what we newly describe as the nutrition support pyramid (NSP).

Aims To introduce the concept of the NSP and to describe the composition and temporal trends in the NSP in a UK regional paediatric cohort.

Methods We performed a retrospective cohort study (database/clinical note review) of all children (<16 yrs) in SE Scotland requiring NS over a 7-year period (2004–2010). We divided all children having NS into levels of the NSP, which comprises four levels of nutrition support; a 5th level is children with IF who have required transplantation (Tx) to achieve intestinal adaptation. The NSP base comprises children receiving HETF, the second level is children with severe upper GI dysmotility requiring jejunal HETF, the penultimate level is children with type II IF (prolonged hospital PN), and the top level is type III IF (children who receive HPN). Poisson regression models and Fisher's exact testing were then used to compare the period prevalence (per calendar year) of children <16 yrs requiring NS and the proportions of each level of the NSP between the two epochs of 2004–2006 and 2008–2010.

Results There were a total of 780 NS episodes in 702 children (51% male); 69 (10%) had multiple episodes of NS. Median (IQR) age at commencing NS was 1.0 (0.2–4.7) yrs. There was a significant increase in the period prevalence of children requiring NS between the two epochs (p=0.004). However, although the number of children requiring HETF (level 1) rose from 372 to 422 between the two epochs, there was a non-significant change in the shape of the NSP (determined by the relative size of each level) between the two epochs (p=0.736). During the entire study period a total of 715 NS episodes were located on the base level (HETF); 31 on the second level (jejunal HETF); 21 on the penultimate level (type II IF); and 14 on the top level (type III IF), with four children requiring Tx to achieve enteral autonomy.

Conclusion We have introduced the concept of a NSP, not previously described, and shown that the NSP has significantly increased in size (number of children requiring NS) without a significant change in the shape (relative distribution of complexity). The NSP is a simple tool which allows us to show a significant increase in NST workload without any decrease in complexity over just 7 years.

Competing interests None declared.

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OC-121 FIBROBLAST ACTIVATION IN THE TUMOUR MICROENVIRONMENT PROMOTES TUMOUR CELL INVASION AND RESISTANCE TO CHEMOTHERAPY IN OESOPHAGEAL ADENOCARCINOMA

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Introduction Stromal and other non-malignant cells have the potential to undergo modifications that can synergistically create a supportive microenvironment for tumour growth, invasion and metastasis. Oesophageal adenocarcinoma (EAC) is characterised by early invasion, leading to metastatic disease and therefore only 20% of patients are suitable for treatment with curative intent. Cancer associated fibroblasts (CAFs) have an activated, myofibroblastic phenotype and have been recognised as mediators of tumour