endoscopic modality but 75% had anal pathology including haemorrhoids, fissures, skin tags or prolapse. In patients 30–39 yrs, two had rectal tumours (1.1%) and twelve had adenomatous polyps (6.6%), five of these being high risk polyps (2.7%). There were no tumours in patients 40–49 yrs but 23 had adenomatous polyps (13.0%), eleven of these being high risk (6.2%). In the ≥50 yrs comparison group, ten had colorectal tumours (3.5%) and 58 had adenomatous polyps (20.6%), 24 of these being high risk (8.5%). Colonoscopy overall comparatively had a much higher pick up rate than limited colonoscopy in all age groups. For <50 yrs colonoscopy had an adenomatous polyp identification rate of 14.7% compared to 7.0% on limited colonoscopy. ≥50 yrs was similar with colonoscopy having a rate of 24.6% compared with 10.8% on limited colonoscopy.

Conclusions This study concludes endoscopy would be necessary to evaluate low risk rectal bleeding in patients aged 30–49 yrs given the rate of significant pathology found, with colonoscopy being the preferred modality due to its much higher identification rate. Patients under 30 with low risk rectal bleeding could be examined in clinic for anal pathology. If no anal bleeding source is found further endoscopic investigation should be considered.

P306 STENTING FOR COLORECTAL CANCER: ARE WE ADHERING TO GUIDELINES? AN OVERVIEW AT A DISTRICT GENERAL HOSPITAL

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10.1136/gutjnl-2020-bsgcampus.380

Introduction Colorectal stenting provides an option for treating and preventing BO, improving symptoms while occasionally bridging to surgery for colorectal cancer (CRC). NICE suggests self-expanding metal stent (SEMS) for the initial management of left sided CRC causing acute BO while ESGE advises SEMS as palliation tool in malignant obstruction or in patients with a high risk of postoperative mortality[1]. We audited patients with CRC treated with colonic stenting locally to investigate compliance with guidelines and outcomes.

Methods In this retrospective study, cases of colonic stenting for CRC over a 5 year period from 1/12/2014 to 1/12/2019 were identified via CIPTS (Delian Systems) an online database of endoscopic procedures. Further demographic and outcome measures including procedure complications, 30-day mortality, intervention location and stent type were collected.

Results Overall 40 patients underwent colonic stenting with Boston Scientific Wireflex stents performed by 3 operators. 42 cases occurred due to two cases of stent migration requiring revision. The mean population age was 77 years with a female preponderance (N=23,57.5%). Overall 30 day mortality was 10% (N=4) whilst 90 day survival was 70% (N=28). Three patients had stenting as bridge therapy to surgical intervention. Complication rates were low with only stent migration (N=2), wire perforation(N=1) and stent fracture(N=1, no reintervention needed) occurring. Therapy was predominantly for Sigmoid lesions(N=21) followed by Descending Colon(N=11) and Splenic Flexure(N=3).

Conclusions Colonic stenting is an effective palliation therapy for obstructing CRC. It is efficacious with low complication rates. Mortality data is comparable to reported emergency surgical data. Survival to 90 days was promising considering many patients had significant comorbidities or metastatic disease when stented. Three cases were bridged to surgery with stenting for optimisation, though not recommended by ESGE. Post-operative and surgical costs were negated with one patient requiring admission post stenting. We acknowledge the low number of patients but offer evidence that our stenting service run by experienced operators is successful. We appreciate that, in general, stenting was compliant with current ESGE guidance.[1] We aim to further collate surgical CRC treatment data over this period and compare outcomes.

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P307 FMT-ASSOCIATED ALTERATIONS IN THE TCR REPERTOIRE OF PATIENTS WITH SEVERE OR FULMINANT CLOSTRIDIOIDES DIFFICILE INFECTION

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10.1136/gutjnl-2020-bsgcampus.381

Introduction The adaptive immune system is important in modulating disease outcomes in *Clostridioides difficile* infection (CDI). Herein, we sought to characterize the TCRα and TCRβ repertoire in peripheral blood mononuclear cells (PBMCs) pre- and post-sequential Faecal Transplantation (FMT) for the treatment of patients with severe or fulminant CDI.

Methods Three patients were included in the study: 1 patient had fulminant CDI with shock while 2 patients had severe CDI. Each cycle of treatment consisted of daily FMT by enema for 3 days plus fidaxomicin 200 mg PO BID for 7–10 days. Samples were collected every 5 days over a period of 4 weeks, then at 6 weeks. Two patients had resolution of diarrhoea 2 weeks following 2 treatment cycles. Two different FMT donor samples were also analysed. Total RNA isolated from PBMCs was used for TCR library preparation using unique molecular identifiers (UMIs). Samples underwent targeted cDNA synthesis, using primers for the constant region of TCRα and TCRβ chains. Libraries were sequenced on Illumina NovaSeq6000. Data pre-processing was conducted using the MIGEC and MIXCR software. We analysed repertoire clonality over time and temporal clonal abundance trajectories of specific TCRs during treatment.

Results The 2 FMT donors displayed lower clonality compared to all 3 CDI patients. Both treatment responders exhibited stable clonality profiles over time. In the non-responder (fulminant CDI), clonality was much higher pre-FMT and drastically decreased following the first cycle of FMT when

diarrhoea resolved transiently. However, following TCR clustering based on temporal trajectories, a significant increase in relative abundance of specific clonotypes was observed at the end of FMT cycle 2 when CDI recurred. Temporal clustering analyses also revealed clonotypes which strongly decreased or increased over time in concomitance with positive response to FMT, suggesting an association with CDI progression and remission.

Conclusions This is the first attempt to assess the potential of TCR repertoire profiling as a prognostic tool for assessing clinical outcomes of FMT in severe or fulminant CDI and of evaluating the role that specific T cell clonotypes may play in mediating FMT efficacy.

P308 EXPLORATORY STUDY OF URINARY PEPTIDE MARKERS IN COLORECTAL CANCER AND LINKAGE TO HISTOPATHOLOGY

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10.1136/gutjnl-2020-bsgcampus.382

Introduction Colorectal cancer (CRC) is common and symptoms are often vague and non-specific. Superior methods of risk stratification are required. This study explored proteomic CRC markers released from the tumour site into the periphery (blood and urine). This work could contribute to a novel multi-parametric diagnostic test for accurate and easy-to-use diagnosis and monitoring of CRC.

Methods Capillary electrophoresis mass spectrometry (CE-MS) was used to perform proteomic profiling and to search for CRC-specific peptide fragments in blood and urine samples of CRC cases and normal controls. Based on the terminal amino acid sequence motifs, proteases responsible for CRC peptide marker cleavage were predicted and validated by immunohistochemistry (IHC) of CRC and normal colonic tissue sections.

Results Six CRC peptide markers were identified in both urine and blood; many others possess sequence overlap (table 1). These peptides belong to the interstitial collagen chains α-1(I), α-1(III) and α-2(I), but also to fibrinogen α, apolipoprotein A-I, uromodulin and gelsolin. Protease prediction revealed 13 proteases in urine and 17 in blood potentially involved in CRC pathology. Of these, 12 were predicted to be associated with both urinary and plasma CRC peptide markers. Meprin 1α (MEP1A) was selected as a proof-of-concept candidate at the cancer tissue site. Using IHC, MEP1A identified at strong intensity (Allred score 3) in 75% of the tumour tissues versus 38% of the adjacent normal tissue ($z=1.069$ $p\geq0.2$), and was seen at the advancing margin of the tumour.

Conclusions We have previously shown the role of FGF7 in the tumour microenviroment and in this exploratory study has shown the existence of peptide markers for CRC in plasma and urine. Increased MEP1A expression was shown in CRC tissue and suggests a link with more aggressive tumour pathology. Findings supports published literature on MEP1A and provides a platform for further proteomic studies on the significance of MEP1A and other extracellular matrix degrading proteases in CRC.

CE-MS and sequence characteristics of CRC peptide marker candidates that showed significant differences in their distribution between CRC cases and controls.

P309 OUR BOWEL CLEANSING SERVICE EVALUATION DOES NOT SUPPORT SWITCH FROM MOVIPREP TO PLENVU

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10.1136/gutjnl-2020-bsgcampus.383

Background and Aims Bowel cleansing (prep) is usually the most demanding and yet important aspect in colonoscopy. Adequate prep is prerequisite for complete, accurate and comfortable colonoscopy. Polyethylene glycol based agents have been deemed the safest category of prep. Moviprep has been the 1st line cleansing agent for patients attending for screening colonoscopy in the North of Tyne Bowel Screening Centre. Recently we have attempted to use Plenvu in some patients as it has less volume (0.5 vs 1 litre) and a different flavour to Moviprep. However it costs more. 6 colonoscopists perform procedures in 4 sites. We had limited supply of Plenvu so we decided to do a 'real-world' service evaluation to determine if the smaller volume would lead to:

1. Comparable bowel cleansing
2. Reduction in proportion of patients unable to complete ingestion of cleansing agent

Method Patients due screening colonoscopy were given either Plenvu or Moviprep. The colonoscopists were blinded to the cleansing agent until after they had scored the effect of cleansing using the Boston bowel preparation scale (BBPS) after the procedure. Completion of ingestion of agent, patient

Abstract P308 Table 1 CE-MS profiling Amino acid sequence and protein information in urine in plasma

MS mass [Da]	CE-time [min]	MS mass [Da]	CE-time [min]	Sequence	Protein
1016.45	25.79	1016.44	25.88	777-ApGDKGESGPS-787	COL1A1
1200.54	25.03	1200.54	24.82	709-KGDAGApGApGSQG-722	COL1A1
1693.76	23.48	1693.77	23.69	222-PpGPpGKNGDDGEAGKpG-239	COL1A1
1732.77	28.18	1732.77	28.42	605-WVGTGASEAEKTGAQEL-621	GSN
1737.78	23.73	1737.77	23.77	585-NDGAPGKNGERGGpGGpGp-604	COL3A1
1737.78	31.00	1737.77	30.85	541-TGSpGSpGPDGKTGPpGPAG-560	COL1A1
4638.10	25.78	4638.09	25.70	—	n.i.
6236.91	21.07	6236.84	20.95	—	n.i.