joint colorectal MDT clinics. A total of 31 consultations were observed with IBD patients aged between 18–70 years old.

A total of 40 in-depth qualitative interviews were conducted with IBD patients; healthcare professionals and eminent stakeholders in gastroenterology. Ethnographic fieldnotes from observation and transcripts from interviews were analysed using a thematic analysis approach.

Results Key characteristics of patient-centred professionalism in gastroenterology have been elicited and categorised into thematic areas including shared decision making; transparency, openness and honesty; information and knowledge transfer and integrated approaches to care. Patients' descriptions of experiences of consultations with healthcare professionals are vivid and reveal both best practise in gastroenterological practises in secondary care as well as unexpected views about encounters with the medical profession. An output from this study involves the creation of materials to support gastroenterological outpatient clinic consultations to enhance the optimal professional practise and patient-professional communication.

Conclusion Patients' understandings of patient-centred professionalism, coupled with healthcare professionals and stakeholder understandings of the concept, offer the opportunity to develop enhanced consultations in gastroenterological outpatient clinics.

Disclosure of Interest None Declared.

REFERENCE

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PTH-098 ARE OUTCOMES FOLLOWING LAPAROSCOPIC RESECTION FOR INFLAMMATORY BOWEL DISEASE IN ADULTS AND CHILDREN COMPARABLE?

doi:10.1136/gutjnl-2013-304907.585

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Introduction Inflammatory bowel disease (IBD) has prevalence in Europe of approximately 2.2 million, with evidence of increasing incidence in the paediatric population. Up to 40% of patients will require surgery for their disease, the majority within the first year of diagnosis. Since 2007, a single surgeon whose main practise is in adults has performed laparoscopic resectional surgery for IBD in adults and children within separate dedicated adult and paediatric IBD multidisciplinary teams in a tertiary referral centre. Our aim was to assess short-term outcomes for adults and children following laparoscopic resectional surgery for IBD.

Methods Analysis of a prospectively collected database was carried out to include all patients who had undergone a laparoscopic resection for IBD (excluding stoma formation alone and ileoanal pouch surgery) under the care of one surgeon between December 2007 and July 2012.

Results Fifty-nine patients underwent laparoscopic resections (28 children and 31 adults). Median age for children was 14 years (range 8–16 years) and adults 32 years (range 21–63 years). The median BMI for adults was 23 (range 18–38) and 19.5 for children (range 13–29.5). Operative times for adults and children were similar with a median of 210 and 165 minutes respectively ($p = 0.09$). Postoperative complication rates were not significantly different: 6 (19%) in the adult population and 4 (14%) in children ($p = 0.73$). There was 1 anastomotic leak (in the adult group). Median length of stay was 5 days in adults vs 6 days in children ($p = 0.09$).

Conclusion Laparoscopic surgery in children is safe when performed by an experienced surgeon whose normal practise is in adults, with acceptable outcomes when compared to adults.

Disclosure of Interest None Declared.

PTH-099 DISTINCTIVE GENE EXPRESSION PROFILES IN THE WHOLE BLOOD OF PATIENTS WITH MODERATE TO SEVERE ULCERATIVE COLITIS AND CROHN'S DISEASE

doi:10.1136/gutjnl-2013-304907.586

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Introduction The aim of this study was to define whole blood (WB) gene expression profiles in moderate to severe ulcerative colitis (UC) and Crohn's disease (CD) patients, and to elucidate modulated genes and pathways that are shared by and also unique to each disease. Gene expression profiling of UC and CD WB has not been compared in a study of this size, and the subset of non-overlapping genes identified could potentially lead to a means to discriminate between these two forms of IBD. A molecular diagnostic assay based on gene expression from readily accessible tissue (WB) would have great utility in differentiating between UC and CD, a common diagnostic dilemma.

Methods WB samples were collected from a subset of patients in one of two clinical trials: PURSUIT-SC, a study to evaluate safety and efficacy of induction therapy with SC golimumab in patients with moderate to severe UC, and CERTIFI, a study to evaluate safety and efficacy of ustekinumab therapy in patients with moderate to severe CD. In both studies, samples ($n = 69$ UC, 204 CD) were collected at baseline for mRNA expression profiling using Affymetrix HG-U133+ PM arrays. Samples from healthy volunteers were obtained independently of the trials. Changes in gene expression of > 1.5 -fold and false detection rate (FDR) p -value < 0.05 were considered significant.

Results There was overlap in the significant changes in gene expression observed in the WB of UC and CD patients compared to normal controls. Of the 1229 differentially expressed transcripts in UC, 63% (45% relative to CD) overlapped with those in CD WB. Over-expressed genes in UC and CD included CD177, IL1R1, IL17RA, MMPs, and other genes involved in systemic inflammation, cellular cytotoxicity, and lymphocyte migration. However, significant proportions of genes (37% of UC gene changes, or 55% of CD) were uniquely expressed in either disease. Genes expressed specifically in UC included regulators of cell death and survival, eg BCL2A1, and several integrin isoforms. Differentially expressed genes specific to CD included IL23A, genes involved in ubiquitination and autophagy, eg ATG9B, and several chemokines. Pathways unique to CD involved B-cell receptor signalling and protein degradation, while oncogenic mechanisms were more predominant in pathways uniquely upregulated in UC.

Conclusion Despite sharing many of the same upregulated transcripts, WB of CD and UC patients also demonstrated significant proportions of differentially expressed genes. Transcriptional profiles in circulating immune cells found in WB may serve as a surrogate for relaying the state of less-accessible luminal tissues in UC and CD patients, and have the potential to aid in differential diagnosis of these diseases.

Disclosure of Interest S. Telesco Employee of: Janssen R&D, LLC, K. Li Employee of: Janssen R&D, LLC, C. Marano Employee of: Janssen R&D, LLC, C. Gasink Employee of: Janssen R&D, LLC, K. Ma Employee of: Janssen R&D, LLC, R. Strauss Employee of: Janssen R&D, LLC, C. Brodmerkel Employee of: Janssen R&D, LLC

PTH-100 PSYCHOLOGICAL MORBIDITY AND PROVISION OF PSYCHOLOGICAL SUPPORT IN THE INFLAMMATORY BOWEL DISEASE CLINIC

doi:10.1136/gutjnl-2013-304907.587

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Introduction Inflammatory bowel disease (IBD) can have a significant impact on physical, psychological and social wellbeing. We aimed to survey the impact of IBD on our patients' lives and their perceptions of psychological support use and availability.

Methods Inflammatory bowel disease (IBD) can have a significant impact on physical, psychological and social wellbeing. We aimed to survey the impact of IBD on our patients' lives and their perceptions of psychological support use and availability.

Results 6 patients were excluded as they had not completed the questionnaire. 94 patients were included (43 male, 51 female, average age 42 years, range 17–76). 46 had a diagnosis of Crohn's disease, 41 ulcerative colitis and 7 indeterminate colitis. Average disease duration for these patients was 15 years (range 1–51 years). Over the past 6 months 20 had symptoms constantly, 16 often, 17 occasionally, 10 sometimes, 13 rarely and 18 never. The average SIBDQ score was 48 (range 21–70). The average HAD score was 12.6 (range 0–33). When separated into HAD A (anxiety) and HAD D (depression) scores were 8.1 (range 0–18) and 4.8 (range 0–15) on average respectively, a score of 8 to 10 for either subscale being suggestive of the presence of the respective state. They were also asked which services they had previously used as forms of support. Of the 86 patients who answered this portion of the questionnaire, 13 (15%) said they had previously had counselling or psychological input, and 32 (37%) said they would like counselling or psychological input in the future if it was available.

Conclusion Our survey suggests there may be a higher rate of anxiety in patients with IBD, and that over a third of our patients would like access to psychological and counselling services if they were available. Psychological support is important to patients with IBD and should be incorporated into their management.

Disclosure of Interest None Declared.

PTH-101 THE BURDEN OF IRON DEFICIENCY ANAEMIA IN A TERTIARY IBD CENTRE POPULATION

doi:10.1136/gutjnl-2013-304907.588

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Introduction Anaemia is the most common extraintestinal manifestation of IBD, with iron deficiency being the most prevalent cause. The ECCO guidelines published in 2012 included the management of anaemia in UC. Previous studies have shown up to 1/3 of the IBD population are anaemic. Anaemia may affect quality of life in patients. There remains uncertainty in the clinical benefit in treatment of mildly anaemic and iron deficient patients. The aim of the study was to identify the burden of iron deficiency anaemia in patients with IBD in a tertiary referral centre and whether we are treating this according to the ECCO guidelines.

Methods Consecutive patients with IBD reviewed in general gastroenterology and specialist IBD clinics during one month period extending from the 1st of December 2012 to the 1st of January 2013 were included. Hb, MCV, ferritin and transferrin saturations were recorded. Results were documented prospectively. Iron deficiency was diagnosed on the basis of recent ECCO guidelines. Anaemia was defined as Hb < 12 g/dL in females and < 13 g/dL in males. Treatment with oral or parenteral iron was also noted.

Results Out of 104 patients seen during this period, 21 (20.2%) patients had iron deficiency out of which 11 (10.6%) were anaemic. 3/11 (27.3%) patients with iron deficiency anaemia had a Hb of less than 10, 2/3 of which received parental iron. One received no treatment. Out of the remaining patients with milder iron deficiency anaemia (Hb > 10 g/dL), 3 had no treatment, 1 had IV only, 2 had oral only and 2 had both IV and oral. In the Iron deficient non anaemic group, 6/10 had no treatment, 2/10 had oral iron and 2/10 had parental iron.

Conclusion Our study showed 20.2% of IBD patients attending over a one month period had iron deficiency anaemia or iron deficiency. Treatment of iron deficiency with and without anaemia is variable and could improve with adherence to a clear protocol. The question of whether the treatment of iron deficiency without significant anaemia in IBD improves fatigue and QOL requires further research.

Disclosure of Interest None Declared.

PTH-102 PRELIMINARY EVIDENCE FOR A ROLE OF THE RENIN ANGIOTENSIN SYSTEM IN INTESTINAL FIBROSIS IN CROHN'S DISEASE USING ANGIOTENSIN RECEPTOR IMMUNOHISTOCHEMISTRY

doi:10.1136/gutjnl-2013-304907.589

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Introduction Fibrosis is a major limitation to successful non-surgical treatment of Crohn's disease (CD) and is a cause of significant morbidity. The pathophysiological determinants of intestinal fibrosis in CD remain uncertain. The renin-angiotensin system (RAS) plays a critical role in blood pressure control and fluid and electrolyte homeostasis but has recently been implicated in fibrogenesis in multiple organ systems. Angiotensin II is the main active peptide in the RAS and evidence suggests it has important proliferative and profibrogenic roles acting through its AT1 receptor. Pharmacological blockade of the AT1 receptor has become a key element in the management of chronic cardiac and renal disorders and abrogates fibrosis. It also appears anti-fibrotic in chronic liver disease. Subsequent studies suggest that the AT2 receptor may act to oppose many of the proliferative and fibrogenic actions of AT1. Few studies have investigated a role for the RAS in intestinal fibrosis in CD.

Aim A preliminary study to use immunohistochemistry to determine AT1 and AT2 expression in resected ileum of patients with CD.

Methods Immunohistochemistry for AT1 and AT2 receptors was performed on archival formalin fixed paraffin embedded ileum of patients who had undergone resection for stricturing CD (n = 6), histologically normal ileum in patients undergoing colectomy for ulcerative colitis (UC) (n = 4) or right hemicolectomy for colon cancer (n = 1). We used commercial antibodies for AT1(SC1173) and AT2(SC9040) and the secondary antibody (Vector ImmPRESS Anti-Rabbit Ig (peroxidase) Polymer Detection Kit) under optimised conditions.

Results AT1 and AT2 staining patterns differed quite clearly between CD resection samples and those from UC and cancer controls. Control and UC cases showed clear staining of the muscularis for AT1 but consistently negative staining of epithelial or lamina propria compartments, whilst AT2 stained only the epithelial layer. Conversely, each of the 6 CD cases showed clear AT1 staining of the epithelial layer as well as muscularis but negative staining for AT2 in all areas. Occasional myofibroblast-like cells were also specifically stained by AT1. RTPCR analysis of RNA from CCD18CO cells (intestinal myofibroblast cell line) confirmed AT1 expression and no AT2 expression.

Conclusion These preliminary findings demonstrate a distinct difference in angiotensin receptor expression pattern in CD and non-CD ileum. This suggests a possible alteration in the balance between AT1 and AT2 receptor expression in CD strictures contributing to fibrogenesis and certainly merits further investigation.

Disclosure of Interest None Declared.

PTH-103 CONTROLLING THE BALANCE OF IMMUNITY IN COLITIS: INVESTIGATING THE ROLES OF INTESTINAL MICROBIOTA AND DENDRITIC CELL MIGRATION

doi:10.1136/gutjnl-2013-304907.590

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