(FC = –1.64, p = 0.0011). Outlier analysis showed that *FAM5C* was also grossly under-expressed in the ascending colon in 37.5% of UC patients, demonstrating that its expression is abnormal throughout the colon in a significant proportion of individuals. Expression levels were not abnormal in CD. Expression of *FAM5C* in UC did not correlate with the known markers of inflammation, *IL-8*, *S100A8*, *DEFA5* and *DEFA6*, or with treatment. The under-expression of *FAM5C* in UC was confirmed in biopsies of non-inflamed rectal mucosa from an independent cohort of patients (FC = –1.68, p = 0.0073) and by qPCR (p < 0.001).

Conclusion This is the first description of the under-expression of *FAM5C* in UC. As these observations were made in non-inflamed mucosa, low levels of this protein might be involved in the pathogenesis of the disease. Indications that *FAM5C* may function as tumour suppressor [1], could link to the observed predisposition to colonic malignancy in UC.

Disclosure of Interest None Declared.

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PTH-088 INCIDENTAL DIAGNOSIS OF INFLAMMATORY BOWEL DISEASE IN A BRITISH BOWEL CANCER SCREENING COHORT: A MULTI-CENTRE STUDY

doi:10.1136/gutjnl-2013-304907.575

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Introduction The UK Bowel Cancer Screening Programme (BCSP) was launched in 2006 to cover the entire population of England and Wales. It screens individuals aged 60–69 years with a Faecal Occult Blood test (FOBt) followed by a screening colonoscopy if FOBt positive. We aimed to quantify the incidental diagnosis of Inflammatory Bowel Disease (IBD) and patient outcome in this cohort.

Methods A retrospective review of BCSP outcomes was conducted from launch in February 2007 to August 2012. Screening data included patients invited, number screened (FOBt "normal" or "abnormal") and colonoscopies performed. In those diagnosed with IBD at colonoscopy confirmed on histology, clinical data (demographics, disease characteristics, treatment and outcome) were obtained from case note and electronic record review.

Results Of 477,553 patients invited, 219,705 were screened, representing an uptake of 46.01% and FOBt positivity of 2.35%. Colonoscopy was performed in 5350 patients (female 2287). Polyps were detected in 2344 (39.86%), cancer in 339 (5.77%) and 1383 (23.52%) had a normal examination. Endoscopic appearance suggestive of IBD in 112 patients was confirmed at histology in 66. Eleven patients were excluded as the diagnosis of IBD preceded screening. Twenty-one of 55 incidental cases were female. Median age at diagnosis was 64. Sixteen patients had Crohn's disease (CD), 33 ulcerative colitis (UC) and 6 had IBD-type unclassified (IBDU). Follow-up data was available in 42 patients (mean follow-up 23.9 months). Twenty patients (47.6%) were asymptomatic at diagnosis. Seven (35.0%) of the asymptomatic patients became symptomatic during the follow-up period. Treatment included steroids (11), 5-ASA (34), immunomodulators (azathioprine 6; methotrexate 1) and anti- TNF (infliximab 2; adalimumab 1). None required surgery. In those requiring escalation of therapy (14.3%) the median time to immunomodulation was 21 months (range 5–30 months). Those requiring immunomodulators and/or anti-TNF therapy (male 4; female 2) had asymptomatic extensive UC, symptomatic left-sided UC, symptomatic left- sided IBDU, symptomatic Crohn's colitis and symptomatic stricturing terminal ileal CD (2) at diagnosis.

Conclusion An incidental diagnosis of IBD is not uncommon. With the advent of bowel cancer screening this number is set to increase. A proportion of these patients demonstrate rapid disease progression. Such patients may present an important model for study of early disease with novel insights and evolving treatment paradigms.

Disclosure of Interest None Declared.

PTH-089 IMPACT OF SEASONAL VARIATION ON COURSE OF INFLAMMATORY BOWEL DISEASE AND EFFECT OF DATE OF BIRTHS ON THE ONSET OF DISEASE: A FACT OR A MYTH!

doi:10.1136/gutjnl-2013-304907.576

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Introduction Effect of seasonal variation on the natural history of the inflammatory bowel disease (IBD) is now well known. Also births in certain time of the year may have an impact on the onset of inflammatory bowel disease later in life. We reviewed our cohort with inflammatory bowel disease over the last four years to look for any such association.

Methods Data collection was retrospective over the last 4 years using IBD database and medical records. Clinical and demographic details of newly diagnosed patients with IBD were recorded.

Aims Our aim was to identify any evidence of seasonal variability on natural history of IBD and to identify any link between the onset of IBD symptoms and the date of births.

Results We had 279 newly diagnosed cases of inflammatory bowel disease during the last 4 years (2008–2011). There was incremental rise in the incidence of disease during this period and majority of the cases had UC (70% UC, 30% CD).

There was no consistent correlation of incidence of IBD in any particular season over the last four years (*p value* = 0.065). Furthermore, there was no consistency in the data for the birth dates pattern and the onset of disease symptoms in our cohort.

Conclusion In our retrospective cohort study we could not demonstrate seasonal variability or impact of date of birth on disease onset but ongoing prospective data collection over a longer period of time may help explore this association.

Disclosure of Interest None Declared.

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PTH-090 EFFICACY AND SAFETY OF DOUBLE-DOSING OR DECREASING THE INTERVAL OF ANTI-TNF THERAPY IN CROHN'S DISEASE WHO HAVE SHOWN LOSS OF RESPONSE TO STANDARD ANTI-TNF DOSING REGIMEN - A DGH EXPERIENCE

doi:10.1136/gutjnl-2013-304907.577

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Introduction Loss of response to Infliximab or Adalimumab therapy is commonly encountered during the course of treatment in patients with refractory Crohn's disease (CD). The aim of this study was to evaluate the safety and efficacy of dose intensification; defined as either double-dosing or decreasing interval of anti-tumour

necrosis factor (TNF) therapy in patients with refractory CD, who have lost response to standard dose treatment.

Methods A retrospective interrogation of our local inflammatory bowel disease database at Queen Elizabeth Hospital, Woolwich was undertaken to identify all patients who had had either dose-doubling or decreased dosing intervals of their anti-TNF therapies. Clinic letters, hospital notes, biochemical, endoscopic and radiological data were recorded and disease severity scores calculated using the Harvey-Bradshaw Index. We present our data describing efficacy and safety of these biologic agents at higher dosage.

Results A total of sixteen patients were in our study, 9(56%) female and 7(44%) male and the mean age was 38 years (range 21 – 68 years). Median disease duration was 6 years (range 2 – 13 years). There were 12 patients who were initially started on Infliximab while 4 had Adalimumab as their initial biologic therapy. 11(69%) patients had dose-doubling and 5(31%) patients had decreased dosage intervals due to secondary loss of response to initial anti-TNF at standard dosage regimen. Early response to dose-escalation was experienced by 9/16 (56%) patients while 7/16(44%) patients failed to respond to alteration in anti-TNF therapy regimen. Of the nine patients who initially showed response to intensified regimens, sustained clinical remission was maintained in 5(31%) patients at 12 months and this cohort was successfully weaned of biologic therapy. There was secondary loss of response in 4(25%) patients after median of 7.5 months (range 6–10) at this intensified regimen. No adverse effects were noted in our cohort of patients at this intensified regimen.

Conclusion Our experience of managing CD patients who have failed on their initial standard dose biological therapies has showed that there is certainly value in trialling either increased dosage or decreased dosing intervals of anti-TNF agent. Five patients achieved sustained clinical response and 4 patients had a median further 7 months of disease control prior to relapse. Higher anti-TNF dosage appears to be well tolerated and safe in CD. Of the patients who did fall in the latter two groups, there was a tendency towards reducing the dosing intervals as the more successful strategy above dose-doubling; however this was not statistically significant.

Disclosure of Interest None Declared.

PTH-091 TO EVALUATE THE EFFICACY AND SAFETY OF 6-THIOGUANINE THERAPY IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE – A DGH EXPERIENCE

doi:10.1136/gutjnl-2013-304907.578

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Introduction Conventional thiopurines (Azathioprine/6-Mercaptopurine) are considered to be safe and effective in the treatment of inflammatory bowel disease (IBD). Unfortunately more than 50% of patients discontinue thiopurine therapy, mainly due to the development of adverse events or therapy resistance[1]. In recent years, 6-thioguanine (TG) has been used as an alternative thiopurine in IBD patients failing to tolerate or to respond to conventional thiopurine therapy. The aim of this study was to evaluate the tolerability, safety and efficacy of 6-thioguanine in the treatment of IBD patients in a District General Hospital (DGH).

Methods A retrospective database analysis was performed on all IBD patients who had previously failed to respond or to tolerate conventional thiopurine therapy and were subsequently treated with TG at 20 mg once daily. Rates and reasons for treatment failure were assessed. Clinical features, laboratory values, abdominal imaging and endoscopic remission rates were evaluated.

Results Total of twelve patients received TG and median treatment duration was 8 months (range 1–12). There were 7(58%) female and 5(42%) male. Mean age was 37 years (range 19–62). 6/12(50%) patients had Ulcerative Colitis (UC) and 6/12(50%) had Crohn's Disease (CD). Indications for initiation of 6-thioguanine therapy were conventional thiopurine intolerance 10(83%) and non-response to treatment 2(17%).

Two patients stopped taking treatment within first month due to fear of side effects; one of them wanted to become pregnant. Of 10 patients two failed TG therapy: one due to adverse event (hair loss) and other due to therapy failure. 4/10(40%) patients had partial response, having occasional mild flare ups while further 6/10(60%) patients remained in sustained clinical remission at 6 months on treatment, although one of the patient did not turn up to follow up appointment following 6 months of therapy. Tolerability and efficacy rates were similar in both UC and CD. All patients were closely monitored and no abnormality in liver function tests detected.

Conclusion Our study showed that TG was well tolerated in this selected group of difficult to treat patients. In addition, the use of small dose 20mg daily of TG appears to be relatively safe in IBD patients who failed conventional thiopurine therapy. Well designed prospective trials are required to further evaluate the safety and efficacy of 6-thioguanine.

Disclosure of Interest None Declared.

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PTH-092 INTERVAL SCANNING WITH MAGNETIC RESONANCE ENTEROGRAPHY DEMONSTRATES RESPONSE TO ANTI-TNF THERAPY AND HAS UTILITY IN REASSESSMENT OF CROHN'S DISEASE

doi:10.1136/gutjnl-2013-304907.579

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Introduction NICE guidelines mandate yearly reassessment of disease activity for those treated with anti-TNF therapy (ATT). Magnetic resonance enterography (MRE) is established in the assessment of small bowel Crohn's disease, however, there is little data to support its utility in disease monitoring. We examined MRE prior to treatment and after at least 6 months treatment with ATT, observing for radiological remission or change in disease burden.

Methods We identified 27 patients (infliximab n = 23 adalimumab n = 4) who underwent pre-treatment and reassessment MRE from a local database of patients treated with ATT. MRE scans were assessed by a consultant radiologist, measuring location of lesions, number of skip lesions, length of affected small bowel and skip lesion wall thickness.

Results Median time to MRE post initiation of ATT was 12 months (range 6–20). All patients were ATT naïve prior to treatment; all but 2 were treated with concomitant immunosuppression. In 63% (n = 17) of patients, there was small bowel disease noted in > 1 location; terminal ileum 74% (20), distal ileum 37% (10), mid ileum 22% (6), proximal ileum 18% (5), distal jejunum 15% (4), mid jejunum 4% (1) and duodenum 4% (1). In no instances had disease spread to a new location on interval scanning. Total length of involvement (cm) improved post-treatment from median 15cm (range 3–50) to 6.8cm (0–33) p = 0.012, as did length of the dominant lesion 6.5cm (2.5–30) vs 3cm (0–30) p = 0.001. Lesion bowel wall thickness also improved 7mm (4–12) vs 5mm (2–10) p = 0.0006. Disease burden, calculated by total stricture length x bowel wall thickness, also improved, 80 (12–400) vs 32 (0–264) p = 0.001. Improvement in number of skip lesions per-patient was not significant 2 (1–6) vs 1 (0–5) p = 0.2; in 2 cases the number of skip lesions increased. In no cases was the total length of involvement