satisfaction survey to measure quality. A prospective study is warranted as our service expands.

Disclosure of Interest None Declared.

REFERENCES

- 1. Impact of electronic messaging on the patient-physician interaction. Wallweiner M et al. J Telemed Telecare. 2009; 15(5):243-250
- 2. Royal College of Nursing (2012) Inflammatory bowel disease nursing, London: RCN. Publication code 004 197

PTH-076 UNIVERSITY HOSPITAL SOUTHAMPTON IBD PORTAL PILOT- AN INNOVATIVE IT TOOL TO PROMOTE PATIENT **SELF-CARE**

doi:10.1136/gutjnl-2013-304907.563

^{1,*}M Naghibi, ²M Bettey, ²F Catherine, ²J Swabe, ²J Hunter, ²K Hamer, ¹F J Cummings. ¹Gastroenterology; ²University Hospital Southampton, Southampton, UK

Introduction Chronic disease management represents a big challenge to the NHS. The IBD standards specify the use of IT to support patient care and to optimise clinical management through data collection and audit. The development of innovative patient care pathways are required to meet these challenges as well as the Quality, Innovation, Productivity and Prevention (QIPP) agenda. 'My Health Record' is a secure web-based service built on the Microsoft HealthVault platform, which allows storage of health information from many sources in one secure online location. The IBD team and UHS IT department, in collaboration with web developers, GetReal, have designed this pilot website with the objective of improving patient access and care. Methods The IBD portal aims to provide an email based 'Flareline', record current and past medication history, inform patients of upcoming outpatient and endoscopy appointments, allow patient access to verified relevant investigation results, food/stool/health diaries and to provide tailored care plans with email and SMS reminders. We are taking advantage of existing innovative technologies, such as Smartphones capable of 'Near Field Communication' (NFC) and NFC enabled weight scales. These weight scales upload data directly to patient records, where aims and parameters are set, which alert the clinician to the progress of the patient.

Results The pilot IBD portal was launched in September 2012. We have recruited n = 55 patients over 5 months, with n = 19 patients completing the registration process. The most commonly used function of the service to date has been the email 'Flareline' and messaging service. These enquiries were answered with in one day for 'Flareline' messages and 1.8 days for non-urgent messages. Three patients have been supplied with NFC enabled weight scales with all patients using the devices regularly. The data collected using the NFC devices has lead to reliable clinical data and timely changes in treatment, particularly dietetic input.

Conclusion IBD is a chronic disease with a spectrum of clinical activity effecting quality of life and occurs in a significant proportion of patients in working age. The development of a web-based IBD portal is an innovative addition to IBD services with a potential to improve patient care and will lead to the development of new patient care pathways in collaboration with local care commissioning groups. We aim to improve cost effectiveness by reducing outpatient visits, reducing work load from phone based flareline enquiries and, provide more information on local IBD services for patients. Challenges to the IBD pilot so far have been to engage patients in this new model of care for chronic disease management.

Disclosure of Interest None Declared.

PTH-077 THE CHANGING FACE OF CLOSTRIDIUM DIFFICILE INFECTION

doi:10.1136/gutjnl-2013-304907.564

^{1,*}N M Joshi, ²J Seale, ²S Das. ¹Centre for Digestive Diseases, Barts and The London School of Medicine and Dentistry; ²Department of Medical Microbiology, Barts Health NHS trust, London, UK

Introduction C.difficile infection (CDI) is the most common identified cause of antibiotic associated diarrhoea and carries a significant mortality. Several reports have demonstrated that exogenous infection plays an important role in the spread of CDI. Reports show that ribotype 027 has been responsible for large outbreaks of CDI and is associated with a poorer outcome.

Methods All cases of CDI over a 9 month period (ending August 2012) were cultured and typed by the London reference laboratory. For each case, retrospective data on patient demographics, admission dates, ward and clinical team were analysed.

Results 32 new cases of CDI occurred of which 22(69%) could be ribotyped. All cases had had antibiotic exposure. Average age: 67 years, 27% of cases were from patients admitted to critical care and 13% were under elderly care. 27% of all cases were community and 73% hospital acquired. 12 ribotypes were seen (table 1), 1 case of type 027. There were no cases of CDI of the same ribotype originating in the same clinical area or under the care of the same clinical team within 30 days of each other. 1 patient (ribotype 015) underwent colectomy for colonic perforation secondary to extensive pseudomembranous colitis with co-existing diverticular disease. There was 16% overall mortality on index admission with 1 death indirectly attributable to CDI (ribotype 020).

Abstract PTH-077 Table 1 No predominating ribotype was seen, 1 case of type 027

| Ribotype | 002 | 003 | 014 | 015 | 020 | 027 | 106 | 023,031,056,176,411 |
|-------------|-----|-----|-----|-----|-----|-----|-----|---------------------|
| No of cases | 4 | 2 | 3 | 2 | 3 | 1 | 2 | 1 case of each |

Conclusion In contrast to previous literature, type 027 was not the predominant ribotype seen in our cohort. The case requiring colectomy was type 015 and the death indirectly attributed to CDI was also not caused by type 027. This demonstrates a possible shift in the epidemiology of CDI. The groups most at risk were patients admitted to critical care and those under the care of the elderly care physicians with an overall 16% mortality whilst still admitted. There was little evidence of cross-infection and most cases were endogenously acquired indicating that infection prevention and control methods being practised at our Trust are effective. These findings also suggest that the main cause of CDI in this study arises from selection pressure secondary to antimicrobial use and emphasises the importance of antibiotic stewardship in the prevention and control of this infection.

Disclosure of Interest None Declared.

Inflammatory bowel disease

PTH-078 A PROSPECTIVE EVALUATION OF THE PREDICTIVE VALUE OF FAECAL CALPROTECTIN IN QUIESCENT CROHN'S **DISEASE**

doi:10.1136/gutjnl-2013-304907.565

^{1,*}L A Smith, ¹G Naismith, ²S Barry, ¹J I Munro, ¹S Laird, ³K Rankin, ¹J Morris, ⁴J W Winter, ¹D R Gaya. ¹Gastroenterology, Glasgow Royal Infimary; ²Robertson Centre for Biostatistics, University of Glasgow; ³Clinical Biochemistry, Glasgow Royal Infimary; ⁴Gastroenterology, University of Glasgow, Glasgow, UK

Introduction Studies have suggested that faecal calprotectin (FC) levels may increase early in inflammatory bowel disease relapse before the patient is symptomatic and thus may be useful to identify patients at a higher risk of relapsing. The purpose of this study was to evaluate the role of FC in predicting relapse in patients followed up for a minimum of 12 months and to ascertain the best cut-off for this in our cohort of adult patients with quiescent Crohn's disease (CD).

Methods Patients with CD in clinical remission were recruited and followed up prospectively for a minimum of 12 months. Participants provided stool for FC concentration analysis and the study was terminated once the last recruited patient reached a follow up period of 365 days. Remission was defined as a Crohn's disease activity index (CDAI) of < 150. Relapse was defined as either a need for escalation of medical therapy, surgery for active CD or progression of disease phenotype using the Montreal classification. The study was approved by the West of Scotland Research Ethics Service (REC reference 10/ S0704/1). The Receiver Operating Characteristic (ROC) curve of relapse by 12 months, based on FC value at baseline, was calculated. Kaplan-Meier curves of time to relapse, some of which were longer than 12 months, were based on the resulting best FC cut-off value for predicting relapse (with patients who had not relapsed being censored at end of follow-up) and compared using the log-rank tests.

Results 98 patients were recruited. One patient was lost to follow up, 1 died and the care of 3 patients was transferred to another centre, before either relapsing or being followed up for 12 months. Of the 93 remaining patients 11 (12%) had relapsed by 12 months. The median FC was lower for non-relapsers, 96 µg/g (IQR 39–237), than for relapsers, 328 μ g/g (IQR 189–574), (p = 0.008). The area under the ROC curve to predict relapse using FC was 74.8% (Figure 1). A cut-off FC value of 240 $\mu g/g$ to predict relapse of quiescent Crohn's disease over the course of one year was associated with a sensitivity of 72.7% and specificity of 74.3%. Negative predictive value was high at 95.3% and positive predictive value was 27.6%. There was a significant difference in time to relapse for those with the first FC value below or above 240 μ g/g (p = 0.011).

Conclusion In this prospective dataset, FC appears to be a useful, non-invasive tool to help identify quiescent Crohn's disease patients at a low risk of relapse over the ensuing 12 months. A FC value of $240 \,\mu g/g$ was deemed the best cut-off value in our patients.

Disclosure of Interest None Declared.

PTH-079 THIOPURINE WITHDRAWAL FOR SUSTAINED REMISSION IN IBD: A UK MULTICENTRE STUDY

doi:10.1136/gutinl-2013-304907.566

^{1,*}N A Kennedy, ²S J Reynolds, ³R Dattani, ³H Nayee, ⁴R Felwick, ⁴R Harris, ⁵S M Senanayake, ⁶H Al-Hilou, ⁷D R Gaya, ⁶P Irving, ⁵M Parkes, ⁴J F R F Cummings, ¹I D Arnott, ¹J Satsangi, ²A Lobo, ³J O Lindsay, ¹C W Lees. ¹Gastroenterology, Western General Hospital, Edinburgh; ²Gastroenterology, Royal Hallamshire Hospital, Sheffield; ³Gastroenterology, Barts and the London Hospital, London; 4Gastroenterology, Southampton General Hospital, Southampton; 5Gastroenterology, Addenbrooke's Hospital, Cambridge; ⁶Gastroenterology, Guy's and St Thomas', London; ⁷Gastroenterology, Glasgow Royal Infirmary, Glasgow, UK

Introduction Thiopurine therapy is effective in maintaining clinical remission in IBD. However, long-term therapy is associated with an increased risk of lymphoma; therefore in clinical practise it may be appropriate to withdraw thiopurines after prolonged remission. Nevertheless, many patients will experience disease relapse within 12 months of drug withdrawal.

The Aim of the present study was to retrospectively determine the relapse rate in ulcerative colitis (UC) and Crohn's disease (CD) following azathioprine (AZA) or mercaptopurine (MP) withdrawal and to determine factors predictive of relapse.

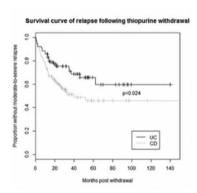
Methods Patients were identified by electronic case note review of IBD patients in eight major centres around the United Kingdom. Major inclusion criteria were AZA and/or MP therapy for a minimum of 3 years, AZA/MP withdrawn due to sustained clinical remission no steroid therapy for 6 months prior to drug withdrawal, and minimum 12 months follow-up.

The primary outcome was disease relapse requiring AZA reinitiation, steroids or colectomy within 12 months of AZA/MP withdrawal, with secondary outcome assessed at 24 months. Clinical/ laboratory predictors of relapse were sought.

Results Data was obtained on 97 patients with CD and 78 with UC. Median age at diagnosis was 26y (interquartile range [IQR] 20-38), and 49% were female. Median duration of thiopurine use was 73 months (IQR 54–104). Median duration of follow-up was 39 months (IQR 24-65 months).

CD was associated with a significantly higher risk of relapse than UC on Kaplan Meier analysis (Figure 1, p = 0.024). The moderatesevere relapse rate for 12 months was 27% for CD and 14% for UC. For 24 months, relapse rates were 41% for CD and 28% for UC. Elevated CRP was predictive of relapse at 12 months for CD (0 = 0.017), while elevated platelet count was predictive of relapse at 24 months for UC (0.021).

Retreatment with a thiopurine after relapse was successful in 34/39 (87%) for CD and 17/18 (94%) cases for UC.



Abstract PTH-079 Figure 1

Conclusion Relapse rates after withdrawal of a thiopurine are high, particularly for CD, and predicting this remains difficult. The findings regarding CRP and CD in this data highlight the importance of ensuring patients are in deep remission prior to drug withdrawal. Further studies should evaluate the role of faecal calprotectin in this.

Disclosure of Interest None Declared.

PTH-080 DO WE NEED TO SCREEN OUR INFLAMMATORY BOWEL **DISEASE (IBD) PATIENTS FOR DEPRESSION: THE** PREVALENCE AND SEVERITY OF DEPRESSION WITHIN A TYPICAL DISTRICT GENERAL COHORT OF IBD PATIENTS

doi:10.1136/gutjnl-2013-304907.567

^{1,*}N Swart, ¹D Wellsted, ²K Lithgo, ²T Price, ²M W Johnson. ¹Centre for Lifespan and Chronic Illness Research, University of Hertfordshire, Hatfield; 2Gastroenterology, Luton & Dunstable University Hospital, Luton, UK

Introduction Depression is believed to occur in 15 to 30% of IBD patients, in which suicide is not an uncommon ideation. Some researchers believe that psychiatric illness may have an aetiological role to play in the onset of inflammatory bowel disease (IBD), as the incidence of depression seems to be concentrated in the year before and after the initial diagnosis is made.

Objectives To assess the true prevalence and severity of depression within our inflammatory bowel disease patients.

Methods 2400 patients with IBD in the Luton & Dunstable catchment were invited to participate in a web-based quality of life assessment, with the option to request a paper copy. All patients were deemed eligible provided they were over 18 and under 90 years of age, with no major learning difficulties or pre-existing serious mental disorders. The well validated 9-item self-report "Patient Health Questionnaire" (PHQ) was used. The PHQ-9 has a minimum possible score of 0 and a maximum possible score of 27. Scores of 5, 10, 15, and 20 represent cut-off scores for mild, moderate, moderately severe, and severe depression.

Results 245 patients completed the assessment (43% male; mean age = 53, SD = 17). 45% had Ulcerative Colitis, 45% had Crohn's