Results In the period prior to Vitamin B12 injection, the majority reported tiredness, lack of energy, poor concentration and mood. Selected control symptoms were only seen in 1/4, figure 1. Of those noticing fatigue, 65% noticed this in the week prior to B12 injection. The community recruited group and the online group showed a similar pattern of complaints, but the incidence was lower in the Community group.

Following B12 injection there was an improvement in the majority, in energy, concentration, fatigue and mood.

Multivariate analysis to identify factors differing between high and low symptom sufferer, showed only age and treatment interval which predicted greater symptom burden but this only explained a very small proportion of the variation seen (less than 9%).

A small proportion reported worsening of symptoms following B12 injection; the most common symptom was feeling cold in 7%.

Conclusions In summary, fatigue, lack of energy, poor mood, and difficulty in concentration are seen frequently as individuals approach the 3 monthly B12 injection both in Crohn’s Disease and pernicious anemia. These improve following injection.

Abstracts

**COLITIS ON CT – DOES THIS MEAN INFLAMMATORY BOWEL DISEASE?**


Introduction Cross sectional imaging is commonly used to assess the abdomen for a variety of symptoms. Colitis reported on CT has become a frequent indication for lower gastrointestinal endoscopy. The outcomes of performing colonoscopy for radiology reported colitis is not clearly known.

Methods A retrospective, single centre study of patients referred for a colonoscopy with the indication of ‘abnormal imaging’. Data was collected using the endoscopy software audit tool over a 12-month period (September 2017 to August 2018). Patients who had undergone an imaging modality other than CT and those with an overt colonic polyp or mass on CT were excluded from the analysis. Analyses were performed using chi-square and student t-test.

Results 249 patients (183 CT (73.5%), 66 CTVC (26.5%)) underwent a colonoscopy for CT evidence of mural thickening (218 (87.6%)), fat stranding (88 (35.3%)), inflammation (104 (41.8%)) or local lymph nodes (37 (14.9%)); median age 68 (IQR 53 – 79); median time from CT to endoscopy 33 days (IQR 12.5 – 56.5). Initial indication for CT examination: Abdominal pain 112 (45.0%), Change in bowel habit 39 (15.7%), ?Malignancy 32 (12.9%), PR bleeding 13 (5.2%), Weight loss 9 (3.6%) and Other 44 (17.7%).

53 (21.3%) patients had completely normal lower GI endoscopy. 111 (44.6%) had uncomplicated diverticulosis, 11 (4.4%) diverticulitis, 20 (8.0%) haemorrhoids and 37 (14.9%) colorectal polyps.

20 patients (8.0%) had endoscopic evidence of colitis; 14 (6%) histological evidence of colitis. 10 (4%) confirmed IBD at 6 months follow up (4 UC, 6 CD).

Abstract PTH 110 Table 1 Comparison of endoscopic diagnoses according to CT features and blood results

<table>
<thead>
<tr>
<th></th>
<th>Normal (n=53)</th>
<th>Colitis (n=20)</th>
<th>Malignancy (n=21)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age, mean</strong></td>
<td>63.6</td>
<td>54.4</td>
<td>69.5</td>
<td>&lt;0.02</td>
</tr>
<tr>
<td><strong>Time to endoscopy (days), mean</strong></td>
<td>45.3</td>
<td>24.5</td>
<td>24.9</td>
<td>&lt;0.04</td>
</tr>
<tr>
<td><strong>Mural thickening (%)</strong></td>
<td>48 (90.1)</td>
<td>19 (95)</td>
<td>20 (95.2)</td>
<td>ns</td>
</tr>
<tr>
<td><strong>Fat stranding (%)</strong></td>
<td>14 (26.4)</td>
<td>12 (60)</td>
<td>9 (42.9)</td>
<td>&lt;0.03</td>
</tr>
<tr>
<td><strong>Inflammation (%)</strong></td>
<td>16 (30.2)</td>
<td>12 (60)</td>
<td>9 (42.9)</td>
<td>0.06</td>
</tr>
<tr>
<td><strong>Lymph nodes (%)</strong></td>
<td>4 (5.7)</td>
<td>8 (40)</td>
<td>11 (52.4)</td>
<td>&lt;0.00006</td>
</tr>
<tr>
<td><strong>Haemoglobin (g/L), mean</strong></td>
<td>128.0</td>
<td>123.8</td>
<td>112.2</td>
<td>0.005</td>
</tr>
<tr>
<td><strong>CRP (mg/L), mean</strong></td>
<td>29.8</td>
<td>55.5</td>
<td>68.1</td>
<td>0.10, &lt;0.05</td>
</tr>
</tbody>
</table>

Abstract PTH-109 Figure 1
Conclusions Colitis reported on CT correlates with endoscopic colitis in only 8% of patients in this study. Less than 5% are diagnosed with IBD at 6 months follow up. The correlation improves in younger patients and with shorter interval between CT and endoscopy. One in five patients had completely normal endoscopy and over 90% had a benign diagnosis. Radiological reporting of fat stranding was an independent risk factor for endoscopic colitis. Anaemia and raised CRP helps identify those at higher risk of malignancy whilst raised risk factor for endoscopic colitis. CRP alone shows a trend towards identifying true colitis. We conclude that the findings of ‘colitis’ on CT does not imply IBD in the majority.

**PTH-111**

**IBD NURSE LED RAPID REFERRAL PATHWAY FOR SUSPECTED IBD – IS IT EFFECTIVE?**

1,2Jessica Posso*, 1Vanessa Cambridge, 1David Walker. 1Royal United Hospitals Bath NHS Foundation Trust, Bath, UK; 2University of Bristol, Bristol, UK

Introduction Recommendations from the UK IBD Standards Group stress the importance of adequate referral pathways in maintaining a high quality of clinical care. In 2016 the gastroenterology department at the Royal United Hospital Bath developed a new rapid referral pathway for suspected inflammatory bowel disease (IBD) patients in order to improve patient care. All GP referrals for suspected IBD were evaluated by a gastroenterology consultant. The clinical information together with any available blood and stool results were reviewed. Symptomatic patients with a suspected new diagnosis of colitis were triaged to an urgent IBD nurse appointment (within 4 weeks) and if appropriate, an urgent flexible sigmoidoscopy with the IBD nurse was offered later the same day. Those patients with a new diagnosis of IBD were given treatment and educational information post procedure. The primary aim of the study was to assess the effectiveness of the new rapid referral pathway and to see if it could be improved further.

Methods A retrospective review was performed of all suspected IBD referrals that had been triaged to an urgent IBD nurse appointment over a 1 year period. For each case identified, a structured proforma review was performed using the original GP referral, the patient’s medical notes, blood profile, stool analysis, endoscopy report and histology.

Results 30 patients were referred via the rapid access pathway over a 1 year period. All 30 patients had a flexible sigmoidoscopy with biopsies performed. 30% (9/30) had a new diagnosis of IBD [8 UC, 1 IBD-U], 3% (1/30) had diverticulitis and 67% (20/30) had a normal procedure. In 93% of cases bloods including a FBC & CRP had been performed at the time of referral. However stool microscopy was only performed in 60% of cases and a faecal calprotectin (FC) in 37%. 83% of patients were seen within 4 weeks and all patients were seen within 6 weeks. The new IBD nurse led rapid access pathway resulted in 83% of suspected IBD patients being reviewed within 4 weeks and all suspected IBD patients being reviewed within 6 weeks. Interestingly, only 30% of patients were found to have a new diagnosis of IBD. The study showed that FC testing was only happening in a minority of cases. The importance of FC testing has since been highlighted at educational meetings with local GPs and a more rigid IBD referral proforma has been developed. This study shows that an IBD nurse led rapid referral pathway can improve the patient experience by facilitating a quicker diagnosis of IBD and enhances continuity of care.

**PTH-112**

**EFFECT OF CO-MORBIDITIES IN CROHN’S DISEASE ASSOCIATED URINARY METABOLIC PROFILES**

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Introduction Distinct metabolic signatures have been detected in urine that differentiate Crohn’s disease (CD) from controls in multiple studies, with consistent discriminatory metabolites derived from bacterial and co-bacterial pathways (Williams, 2009. AJG). Multiple other diseases have also been found to affect the urinary metabolome, and many of these relate to changes in bacterial associated metabolites (Lu, 2013, Front. Med.). This study aimed to examine a real life cohort of CD patients, and so included patients with other co-morbidities, to examine if the same metabolite changes were present, and if these patients could be distinguished from controls despite the presence of co-morbidities.

Methods Nuclear magnetic resonance (H1NMR) spectroscopy was used to acquire urinary metabolic data from 74 CD patients and 100 controls. 19 of the CD group and 48 of the controls had at least one significant co-morbidity (diabetes, asthma, hypertension). Multivariate analysis was performed using OPLS-DA. Univariate analysis was also performed to assess whether bacterial associated metabolites, as demonstrated in previous studies (Williams, 2009), were significantly different in CD patients compared to controls. These metabolites were Hippurate, Alanine, Citrate, P-Cresol, Phenacylglutamine (PAGn), and Dimethylglycine (DMG).