ulcerative colitis (UC) are conflicting with some studies suggesting a potential protective effect. Smoking trends have changed dramatically over the last decades in the United Kingdom with the introduction of a smoking ban in public buildings and the advent of e-cigarettes. We aimed to describe current smoking rates in IBD patients compared to the general population and to ascertain any effects of smoking on disease course.

Methods Self-reported smoking status was elicited in consecutive IBD out-patients and clinical data (phenotype, demographics, treatment history, current disease status) were extracted from the electronic hospital patient record. Office of national statistics 2015 data for the general population were used as the comparator.

Results Of 375 patients (mean age 44.7 years; mean disease duration 10.7 years) 50% suffered from CD, 42% from UC and 8% from IBD-U. Current drug exposure included: 157 mesalazine, 109 thiopurine, 8 methotrexate, 44 infliximab, 34 adalimumab, 6 Vedolizumab and 45 patients were on steroids. Current disease activity was remission (42.4%), mild (41.1%), moderate (14.9) and severe (1.6%). Of 200 ever cigarette smokers 144 had stopped and 56 continued cigarette use, while of 30 ever e-cigarette users 14 had stopped and 16 continued. All e-cigarette users had previously smoked cigarettes and 10 had stopped smoking completely after e-cigarettes.

Crohn’s disease patients were more likely to smoke cigarettes (19.9% vs 8.1%) or e-cigarettes (4.1% vs 3.4%) compared to UC/IBD-U patients (p=0.026).

Infliximab use was more common in cigarette smokers (13.2%) and e-cigarette users (21.4%) vs non-smokers (11.2%; p=0.016. Adalimumab use was more common in cigarette smokers (16.9%) and e-cigarette users (7.1%) vs non-smokers (7.6%; p=0.023. The need for previous surgical resection was higher in cigarette smokers (44.2%) and e-cigarette users (55.7%) vs non-smokers (26.8%); p=0.035.

Compared to the general population the proportion of current cigarette smokers (14.9% vs 17.2%) and e-cigarette users was similar in our cohort (4.26% vs 4%).

Conclusion IBD patients show similar smoking behaviour as the general population with 4% using e-cigarettes. The detrimental effect of smoking remains evident in our cohort. IBD patients use e-cigarettes as replacement for cigarettes or as an intermediate step for smoking cessation with no de-novo e-cigarette use in our cohort. Some health authority propose that e-cigarettes are less harmful to health than cigarettes. There are however little data on the effect in IBD. Large scale prospective studies examining the effects of e-cigarette use are required.

PWE-056  MANAGEMENT AND OUTCOMES OF PREGNANCY IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE IN JOINT OBSTETRIC/IBD CLINIC

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Introduction Many women with Inflammatory Bowel Disease (IBD) are of child-bearing age and therefore managing fertility and pregnancy is, for many women, an important part of their care. While an uneventful pregnancy and a healthy baby is the norm in women with IBD, managing these complex conditions in pregnancy can be challenging. Our aim was to look at management and outcomes for pregnant patients with Crohn’s Disease (CD) and Ulcerative Colitis (UC) in a District General Hospital following the implementation of a joint IBD/Ostetric clinic.

Methods Patients with IBD were identified when they booked for their maternity care between 22/2/15–16/7/16. Data was collected retrospectively via both paper notes and online electronic patient record. We obtained information regarding patients’ IBD including diagnosis, medications used during pregnancy and previous surgical history. In addition, Obstetric data was collected, including method of conception, numbers of live births, miscarriage, terminations, birth weight, pre-term delivery, congenital abnormalities and maternal mortality.

Results We found that there was a higher incidence of foetal loss in our cohort after booking visit than would be expected in the general population. In our group of IBD patients only 17% of Crohn’s patients underwent a caesarean section, whilst it was 50% in the UC cohort. One patient with CD delivered pre-term having stopped her anti-TNF therapy early in pregnancy against her physician’s advice. 73% patients in our population delivered at term with good outcomes.

Abstract PWE-056 Table 1

<table>
<thead>
<tr>
<th>Condition</th>
<th>Delivery CD</th>
<th>Delivery UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaginal delivery</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Caesarean section without perianal disease</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Perianal disease with obstetric indication for Caesarean section</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Conclusions It is important for patients to maintain remission during pregnancy by strictly adhering to their medications. Medications used for the management of IBD are safe to take during the conception period and during first two trimesters of pregnancy with the exception of methotrexate and thalidomide. Patients with IBD can be at increased risk of miscarriage.

PWE-057 USING AN EVIDENCE-BASED, EXPERT CONSENSUS TOOL TO GUIDE BIOLOGIC DECISION-MAKING IS ASSOCIATED WITH FAVOURABLE OUTCOMES

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Introduction Treatment with biologic agents is costly and the mechanisms available for inflammatory bowel disease (IBD) remain limited. It is important to optimise the benefit and cost-effectiveness of their use. Therapeutic drug monitoring
(TDM) is a strategy to help achieve this, through the measurement of drug and anti-drug antibody concentrations. The Building Research in IBD Globally (BRIDGe) groups ‘Anti-TNF Optimizer’, an online tool that helps interpretation of TDM and clinical decision-making.

**Methods** We performed a retrospective study of IBD patients on infliximab (IFX) or adalimumab (ADA) at our institution, undergoing TDM between Jan 16-Mar 17. TDM was performed using a drug-tolerant ELISA (IDKmonitor, Immundiagnostik). Disease activity was defined by the combination of clinical symptoms and evidence of biochemical (CRP >10; FCP >150), endoscopic or radiological activity. Clinical decision-making was compared to recommendations made by the BRIDGe ‘Anti-TNF Optimizer’ tool, which suggests that objective evidence should be sought in all cases of suspected primary non-response (PNR) and loss of response (LOR). Subsequent disease course was evaluated using a Physicians Global Assessment (PGA), which took into account clinical, biochemical, endoscopic and/or radiological activity and the need to progress to surgery. Outcomes were described as ‘favourable’ or ‘unfavourable’. Groups were compared using Fisher’s exact test (GraphPad Prism V7.0a).

**Results** 60 patients were included: 30 IFX and 30 ADA. Indications for TDM: LOR 45 (75%), PNR 8 (13%), routine monitoring during remission 7 (12%). Objective evidence of inflammation was sought in all 53 cases of LOR/PNR and found present in 42 (79%). Two patients were lost to follow up and were not included in the final analysis. Of these 40, subsequent clinical management was in keeping with BRIDGe recommendations in 19 (48%).

Of the 19 LOR/PNR patients managed as per BRIDGe recommendations, 15 (79%) achieved a subsequent favourable outcome. The rate of subsequent favourable outcome in the group who were not managed in accordance with BRIDGe was significantly lower at 3/21 (14%, p<0.0001).

**Conclusions** The rate at which objective evidence of inflammation was sought amongst our patients with symptoms suggestive of PNR/LOR was good. However, clinical decision-making deviated from BRIDGe recommendations in majority of cases and this appeared to adversely impact disease course. Results therefore, suggest that using an evidence-based, expert consensus, online tool to guide biologic decision-making with the results of biologic TDM provides benefit in IBD outcomes.

**PWE-058** FACTORS ASSOCIATED WITH INFLAMMATORY BOWEL DISEASE ASSOCIATED COLORECTAL CANCER AND DAMAGE ASSOCIATED MUCOSAL LESION DETECTION

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**Introduction** Colonoscopic surveillance is indicated for the detection of premalignant damage associated mucosal lesion (DALMs) and colorectal cancer (CRC) in patients with chronic inflammatory colitis of greater than 10 years duration. We reviewed all cases of DALM and CRC detection in our IBD cohort over a 4 year period and compared against current BSG guidance for high risk groups (2010).

**Methods** The pathology reporting system of Imperial College Healthcare NHS Trust was interrogated for SNOMED 11a codes for IBD and dysplasia or CRC (D6214, D6216, D6255 and M7400) between 1/9/12–1/1/17. The case notes of these patients were reviewed and those with adenoma related dysplasia excluded. The indication for the detecting procedure was recorded.

Surveillance practice during this time was measured by recording all colonoscopies performed for the indication of IBD (colitis, Crohn’s disease, colitis – ulcerative or IBD assessment) over a 9 year period (1/9/07–1/1/17) from the endoscopy reporting system (Scorpio, Emis Health, UK) of Imperial College Healthcare NHS Trust. The surveillance interval of each individual patient was calculated. A subgroup of 20 patients within this cohort were sampled for case notes review to identify the reasons for inappropriate surveillance.

**Results** Dysplasia and IBD was detected in 59 individuals, 42 were adenomas and excluded, leaving 7 DALMs detected. Three (42%) were not detected during surveillance (two<10 years from symptom onset, one bowel cancer screening program). Two (29%) had cancer. Four (58%) were recognised as DALMs under white light endoscopy, three (42%) were