UC related neoplasia, and in some patients with familial adenomatous polyposis. Incontinence can occur in up to 12%–31% of patients with an ileoanal pouch. Evacuatory difficulty in the absence of mechanical or anatomical abnormality is uncommon and management options are limited. Incontinence and evacuatory disorders associated with the ileoanal pouch can be particularly problematic and difficult to treat using conventional therapies.

Biofeedback therapy is a behavioural treatment which is non-invasive and offers a non-surgical approach as an alternative or adjunct for patients with functional bowel disorders. The theoretical basis for biofeedback is 'learning through reinforcement' or 'operant conditioning'

Methods This was a retrospective single centre study. We reviewed the notes of all patients attending for biofeedback at our institution between Jan 2012 and Oct 2017, and identified all those that did so for ileoanal pouch related problems. We recorded patient reported subjective improvements following biofeedback. The validated International Consultation on Incontinence Questionnaire was used to assess improvement in incontinent symptoms and the evacuatory disorder questionnaire was used to assess improvement in evacuatory disorders. **Result** Twenty-six patients with ileoanal pouch related problems underwent biofeedback. Based on patients' feedback at next clinical encounter following biofeedback, nine reported much improvement, 11 reported some improvement and six reported no improvement. In the group treated for incontinence, quality of life improved significantly from a median pre-treatment score of 80 to a post-treatment score of 41 ($p=0.01$) (table 1). Biofeedback reduced pain, bloating, straining and laxative use in patients with evacuatory disorders.

Abstract PWE-053 Table 1 Incontinence disorder using objective scoring system (n=5) ICIQb Scores

Domain	Pre-biofeedback score (median, range)	Post biofeedback score (median, range)	P value
Bowel pattern	62 (49–62)	46 (39–62)	0.12
Bowel control	82 (33–102)	53 (11–76)	0.21
Non-scored	22 (17–35)	29 (12–29)	0.35
Quality of life	80 (62–98)	41 (30–55)	0.01

Conclusions Biofeedback is associated with significant improvement in quality of life as well as possible improvements in symptoms related to both incontinence and evacuatory disorders. It is probably an underused service. Further larger prospective studies are required to assess the efficacy of biofeedback in pouch related dysfunction.

PWE-054 INFLIXIMAB THERAPEUTIC DRUG MONITORING IN IBD VIRTUAL BIOLOGICS CLINIC LEADS TO DURABLE RESULTS

¹Christian Selinger*, ¹Marco Lenti, ¹Tanya Clark, ¹Helen Rafferty, ¹David Gracie, ¹Alex Ford, ¹Anthony O'Connor, ²Tariq Ahmad, ¹John Hamlin, ¹Rebecca Sagar. ¹Leeds Teaching Hospitals Nhs Trust, Leeds, UK; ²Royal Devon and Exeter Foundation Trust, Exeter, UK

10.1136/gutjnl-2018-BSGAbstracts.186

Introduction We have previously shown that therapeutic drug monitoring (TDM) of infliximab (IFX) trough levels and anti-drug antibodies (ADAs) can aid decision making for patients on biological therapy, in conjunction with clinical symptoms, disease history and investigations. The aims of this follow-up study were to evaluate 1 year outcomes of patients who had decisions changed on the basis of TDM results in our original study, and to test the hypothesis that TDM-based decisions to alter or stop IFX treatment are safe and durable.

Methods In our original study, a blinded treatment decision was first made, without knowledge of IFX trough and ADAs. Immediately after this, TDM results were released and a final treatment decision was recorded. For this study we collected long-term clinical outcomes 12 months after the decision. We compared patients with changed treatment decisions with those where the decision to continue IFX remained unchanged. We defined changed decision groups as (I) IFX stopped, (II) switch to other biological therapy, and (III) continue IFX with adjusted dose or interval. Events of interest were hospitalisation for IBD or further changes to biological therapy.

Results Of 190 patients reviewed in virtual biologics clinic 54 (28%) had decisions changed in the light of results of TDM. Of the 136 patients with an unchanged decision, 128 who continued IFX as previously dosed were used as the comparator group. There were no differences in hospitalisation rates between 3 changed decision groups (I, $p=1$), (II, $p=0.2$), (III, $p=0.4$) and the unchanged decision comparator group (table 1). Similarly, we found no differences in subsequent biologic therapy switches between 3 changed decision groups (I, $p=1$), (II, $p=1$), (III, $p=0.2$) and the unchanged decision comparator group.

Abstract PWE-054 Table 1

	Changed decision – stop	Changed decision – switch biologic	Changed decision – continue with adjusted dose or interval	Unchanged decision – continue IFX at previous dose and interval
n=	9	14	31	128
Hospitalisation	1 (11%)	0 (0%)	2 (6%)	17 (13.3%)
Subsequent biologic switch required	0 (0%)	0 (0%)	2 (6%)	2 (2%)

Conclusion Our study demonstrates that changes to IFX treatment based on TDM were durable. Patients with a decision to stop, switch, or continue with an adjusted IFX dose experienced comparable clinical outcomes with those who continued IFX therapy unchanged. TDM-based decisions about IFX treatment that incorporate the clinical picture can safely alter therapy without exposing patients to an increased risk of hospitalisation or need for subsequent changes to biologic therapy.

PWE-055 CURRENT SMOKING TRENDS IN BRITISH IBD PATIENTS IN THE AGE OF E-CIGARETTES

Christian Selinger*, Khaleel Loonat, Rebecca Sagar. Leeds Teaching Hospitals Nhs Trust, Leeds, UK

10.1136/gutjnl-2018-BSGAbstracts.187

Background Cigarette smoking has a very detrimental effect on the course of Crohn's disease (CD) while data on

ulcerative colitis (UC) are conflicting with some studies suggesting a potential protective effect. Smoking trends have changed dramatically changed 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 (35.7%) 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

¹Erum Shahabuddin*, ²Alexandra Marley, ³Roland Iriarte, ¹Sharon Bartlam, ¹Adam Gornall, ¹Gillian Townson. ¹Princess Royal Hospital Telford, Telford, UK; ²Queen Elizabeth Hospital Birmingham, UK; ³University Hospital Coventry and Warwickshire, UK

10.1136/gutjnl-2018-BSGAbstracts.188

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/Obstetric 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

	Delivery CD	Delivery UC
Vaginal delivery	11	2
Caesarean section without perianal disease	2	3
Perianal disease with obstetric indication for Caesarean section	1	0
	Outcomes CD	Outcomes UC
Live births at term	14	5
Miscarriages	3	1
Terminations	0	0
Premature birth (<37 weeks)	1	0
Low birth weights<2.5 kg	0	0
Foetal abnormalities	0	0
Maternal Mortality	0	0

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

¹Khaleeq Siddiqui*, ²Mohammed Allah-Ditta, ³Mark A Samaan, ¹Sunil Sonwalkar. ¹Gastroenterology Dept, CHFT, Halifax, UK; ²Pharmacy Dept, CHFT, Halifax, UK; ³Guy's and St Thomas' NHS Foundation Trust, Dept. of Gastroenterology, London, UK

10.1136/gutjnl-2018-BSGAbstracts.189

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