physicians or other IBD-associated healthcare professionals, emergency room (ER) visits, hospitalizations and hospital admissions for surgeries); Health Related Quality of Life (HRQoL), pt-reported employment/UC-related sick leave status and Work and Productivity Activity Index (WPAI:GH; including work time missed (absenteeism), impairment while working (presenteeism), overall work productivity impairment, and daily activity impairment domains).

Results A total of 1816 UC pts were enrolled; mean $\pm$ SD age was 38.5 ± 14.6 years and 833 (45.9%) were female. At BL, 230 pts (12.7%) were in remission, 672 pts (37.0%) had mild UC, 668 pts (36.8%) had moderate UC, and 234 (12.9%) had severe UC. Compared to pts in remission, pts with moderate to severe UC had 1.8 to 2.6-fold higher rates of hospitalizations and 1.6 to 2.5-fold higher rates of ER visits over the past 6 months. Pt with moderate and severe disease were associated with lower SIBDQ scores and higher WPAI:GH domain scores (i.e., greater impairment on work productivity) than pts with mild disease or those in remission.

172 (9.5%) pts reported to be unemployed at BL. 183 (10.1%) reported sick leave at BL. Sick leave time ranged from <2 months (59.6%), 2–4 months (12.6%), >4 months (22.4%).

Conclusion The direct and indirect burden of UC is substantial, as measured by healthcare resource utilisation and work-life impact. Pts with moderate and severe UC not only were associated with higher rates of urgent care in hospitalisation and ER visits, but also with poorer quality of life, higher unemployment, sick leave and impaired work productivity than pts with mild UC or in remission. For pts with mild UC, despite comparable HCRU to pts in remission, increased impact on work productivity remains a concern.

PWE-068 ADVERSE EVENTS IN ELDERLY INFLAMMATORY BOWEL DISEASE PATIENTS MANAGED WITH ANTI-TNF THERAPY

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Introduction In a population with an increasing life expectancy, a sizable proportion of inflammatory bowel disease (IBD) patients are elderly. The management of IBD often requires immunosuppressing anti-tumour necrosis factor (anti-TNF) drugs which add to the immunosuppressive effects of ageing. Evidence for the safety of anti-TNF therapy in the elderly is scarce. Our objective was to assess the safety of anti-TNF therapy in the elderly considering their co-morbidities and immunomodulators (IM).

Methods

Retrospective single centre study The IBD database of a large teaching hospital was interrogated for patients aged >65 years who had been prescribed infliximab or adalimumab. Patient electronic records were reviewed along with general practice prescribing records. Data was collected on co-morbidities, IM use, hospitalisations, significant adverse events (any reaction requiring discontinuation of the anti-TNF), and antibiotic prescriptions. Charlson Co-Morbidity index (CCI) was calculated.

Results 80 patients (51 female) aged >65 received either infliximab (n=50) or adalimumab (n=30). Crohn's disease (n=70) was more common and 34 patients were on a concomitant IM. The median duration of follow-up (FU) was 4

years and the median duration of therapy was 14 months. There were 5 deaths during FU, 4 after cessation of anti-TNF (2 pneumonias, 1 chronic obstructive pulmonary disease, 1 malignancy) and 1 patient was still on an anti-TNF (Crohn's related malnutrition). Seven patients developed cancer, 5 still on an anti-TNF and the other two were one and two years post-cessation of anti-TNF. Of the 5 patients who developed cancers on an anti-TNF, all 5 restarted their anti-TNF after treatment of the cancer. Eight patients (10.5%) required hospitalisation due to what was felt to be an anti-TNF related event (7 infective, 1 allergic reaction). Patients on an IM had a 15.4% chance of anti-TNF related hospitalisation vs 4.4% in those not on a concomitant IM ($p=0.09$). Concomitant IM use had no statistical impact on the risk of developing a cancer (9.1% on an IM vs 6.5% not on an IM, $p=0.49$). Of those that required antibiotics, IM use did not seem to increase this risk ($p=0.43$). Thirty one percent of those that stopped their anti-TNF (n=50) did so because of an adverse event. When CCI=0 was compared with a CCI >0, they were no more likely to still be on an anti-TNF after 12 months.

Conclusions In this series, we were unable to demonstrate a relationship between co-morbidities and tolerance of anti-TNF therapy. There was, although not reaching statistical significance, a relationship between concomitant IMs and risk of hospitalisation due potential anti-TNF related events. Elderly patients are more likely to stop anti-TNFs than the younger populations used in larger trials. Concomitant IMs must be carefully considered to reduce the risk of adverse events.

PWE-069 MEASURING THIIOGUANINE NUCLEOTIDE (6-TGN) LEVELS AND CLINICAL RESPONSE IN IBD

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Introduction Monitoring levels of 6-TGN and titrating dose of Azathiopurine (AZA) and Mercaptopurine (6-MP) accordingly to achieve therapeutic concentrations of 6-TGN has been reported to improve outcomes in the treatment of Ulcerative colitis (UC) and Crohn's Disease (CD). The aim of our study was to show how levels of 6-TGN corresponds to clinical outcome.

Method This was a single centre (Royal Free Hospital), retrospective study, of patients receiving AZA or 6MP. We identified our patients by collating those who had been dispensed AZA or 6MP over the past 2 years. We were then able to access their electronic database, and record whether 6-TGN levels were subsequently taken to titrate treatment, and assess clinical outcome.

Results 109 from 426 patients have so far been analysed (F=54 [50%]). UC=45 [41%] CD=64 [59%].

Mean duration on thiopurines was 7.6 years. Mean disease duration was 16.2 years.

74/109 (68%) had 6-TGN levels at some stage.

42/74 (57%) had therapeutic levels, whilst 32/74 (43%) did not.

49/74 (66%) were in clinical remission. 25/74 (34%) were not.

Of those that had therapeutic levels of 6-TGN, 30/42 (71%) were in clinical remission. 7/30 (23%) were in total remission (clinical, biochemical [normal CRP/WCC], endoscopic and histological). 16/30 (53%) were on Azathiopurine (AZA), 14/30 (47%) were on mercaptopurine (6MP). 11/30 (37%) were on combined therapy with biologics.

Of those that had non-therapeutic levels of 6-TGN, 19/32 (59%) were in clinical remission. 5/19 (26%) were in total remission. 12/19 (63%) AZA. 7/19 (37%) 6MP. 7/19 (37%) were on combined therapy.

Of those with therapeutic levels of 6-TGN, 12/42 (29%) were not in clinical remission.

6/12 (50%) AZA, 6/12 (50%) 6MP. 8/12 (75%) were on combined therapy with biologics.

Of the cohort that had non-therapeutic levels of 6-TGN, 13/32 (41%) were not in clinical remission. 6/13 (46%) AZA, 7/13 (44%) 6MP. 11/13 (85%) were on combined therapy.

Conclusion Our study so far suggests that, clinical remission rates were similar (71% vs. 59%) for those who had therapeutic 6-TGN levels and for those who had not. It also shows that even without achieving therapeutic levels of 6-TGN, 59% of patients were still in clinical remission. Our study interestingly highlights that even with therapeutic levels of 6-TGN and with three quarters of patients on combined biologics – 29% were still not in remission. This preliminary study suggests interesting trends, that will be assessed further across the entire population (n=426) and compared with European data.

PWE-070 POST BIOLOGICAL INFUSION MONITORING; IS IT REALLY NECESSARY?

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Introduction Biologic infusion services are seeing ever increasing activity. Facilitating this in a timely and safe manner with limited capacity is increasingly difficult.

Patients are monitored for infusion reactions following infliximab (IFX) and vedolizumab (VDZ) infusions, based on recommendations from the product manufacturers. Patients receiving IFX infusions are monitored in the unit for 2 hours following the infusion first four infusions, 1 hour following infusions 5–9 and 30 min for each infusion thereafter. For VDZ, a 2 hour observation period following the first 2 infusions is recommended.

The introduction of ustekinumab, licensed without a defined post infusion observation period, led us to consider the need for post infusion observation periods in other patient groups.

Methods We reviewed patient records of all patients receiving IFX and VDZ infusions in our clinic between September 2016 and September 2017 to identify infusion reactions and document when these occurred.

Results 1152 infusions of IFX and 330 infusions of VDZ were administered over the 12 month period. The total post-infusion observation time for these patients was 953 hours.

10 infusion reactions occurred (0.9%), all in patients receiving IFX. 6/10 (60%) occurred within 10 mins of starting IFX infusion (immediate), 2/10 (20%) later during the infusion (acute), and 1/10 (10%) occurred 2 weeks after receiving the

infusion (delayed). No infusion reactions occurred during the post-infusion observation period.

No infusion reactions occurred in patients receiving VDZ.

Conclusions We analysed 953 post-infusion observation hours after 1152 IFX and VDZ infusions in our unit over a one-year period. The total infusion reaction rate was 0.9% (10/1152). Of note, none of these occurred during the post-infusion period. The results from this large single centre retrospective study demonstrate that the risk of onset of adverse reactions to either IFX or VDZ during the post infusion observation period is very low. Patients who have not had a reaction during the infusion do not routinely need to stay in the unit for post infusion observation. We hope that by formally adapting this strategy we will better manage the increasing demands on our capacity, whilst still providing safe and appropriate care to our patients.

PWE-071 ETROLIZUMAB INDUCTION IN MODERATE/SEVERE ANTI-TNF INTOLERANT/REFRACTORY (IR) UC: THE HICKORY OPEN-LABEL INDUCTION (OLI) TRIAL

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Introduction HICKORY OLI evaluated the safety and efficacy of etrolizumab (etro) via independent, centrally-read endoscopy, patient (pt)-reported outcomes, and inflammatory biomarkers in pts who are IR to aTNFs.

Methods Pts received etro 105 mg injected SC every 4 weeks (14 week induction). Mayo clinical subscores (MCS) based on endoscopic score (ES), and pt-reported rectal bleeding (RB) and stool frequency (SF) were assessed at baseline (BL) and week 14. Clinical response: ≥ 3 point and 30% reduction of MCS from BL and ≥ 1 point decrease in RB or RB ≤ 1 . Remission: MCS ≤ 2 with individual subscores ≤ 1 and RB=0. Endoscopic improvement: ES ≤ 1 . RB remission: RB=0; SF remission: SF ≤ 1 with ≥ 1 point reduction from BL. The % decline from BL in RB and SF at week 14 was also calculated.

Results HICKORY OLI enrolled 130 UC pts; 45% had previously failed >1 TNF antagonist. BL disease activity included MCS score, 9.4; median C-reactive protein (CRP), 6.6 (95% CI: 2.9, 14.5) g/dL; and median faecal calprotectin (FC), 1778 (95% CI: 898, 3452) mg/kg.

At week 14, etro treatment was associated with clinical response in 50.8% of pts; remission in 12.3%; ES ≤ 1 in 23.9%; RB remission in 52.3%; and SF remission in 35.4%. 43.9% of pts had ≥ 1 point improvement from BL in the ES score, and improved ES scores were associated with increased rates of RB and SF remission. Among pts with ES=0, 100% reported RB ≤ 1 , and 90% reported SF ≤ 1 (table 1). Pts who achieved either SF or RB remission or ES ≤ 1 also demonstrated $>50\%$ geometric mean reduction in CRP (BL ≥ 2.87 mg/L) and $>70\%$ geometric mean reduction in FC.

Conclusions TNF antagonist-experienced pts with moderate-severe UC and high disease burden treated with open label etro for 14 weeks achieved clinically meaningful clinical response and remission and endoscopic improvement. Pts who had a decline in ES ≥ 1 achieved higher rates of RB and SF