Abstracts

moderate-to-severe disease. However, these drugs tend to perform less well in the maintenance of remission. Route of administration may influence efficacy and network meta-analyses of trial data indicate a superiority of intravenous drugs (IV; Infliximab; IFX) over subcutaneous (SC; adalimumab; ADA). We conducted a retrospective multicentre case-control study to compare the efficacy of these two drugs.

Methods Patients administered IFX or ADA as their first biologic, identified from therapy databases of five UK hospitals, were included, if they had completed induction dosing and entered maintenance. Patients receiving IFX as ‘rescue’ therapy were excluded. Data was collected for pre-biologic disease activity (Simple Clinical Colitis Activity Index (SCCAI), C-reactive protein and calprotectin) and throughout anti-TNF therapy. The primary end-point for comparison was the number of patients in clinical remission at 52 weeks (combined features of continuing IFX or ADA therapy and SCCAI score ≤3). Data was collected for duration of therapy, or up to last follow-up, if beyond 52 weeks.

Results 78 IFX (40.3±14.6 years, 33F) and 63 ADA (36.8±14.6 years, 27F) patients were analysed. There were no statistically significant differences in demographics or pre-biologic disease activity between the two groups. At 52 weeks, 58 (74%) IFX patients and 29 (46%) ADA patients remained on therapy (p=0.009) and in remission (26 (33%) vs 5 (8%), p=0.0003). Primary non response was the reason for treatment cessation in 15 (24%) ADA patients and 4 (5%) IFX patients (p=0.0012).

Conclusions Our results from a real-world cohort mirror those produced in the network meta-analyses of clinical trials for these agents, suggesting that IFX is superior to ADA in UC maintenance of remission, demonstrated by improvement in SCCAI scores and treatment continuation at 52 weeks. There were no significant differences in colectomy rates, hospital admission for acute flares or adverse events in the study timeframe.

REFERENCE

PTU-008 INTERLEUKIN 23 AS A NON-INVASIVE TEST OF DISEASE SEVERITY IN PATIENTS WITH UC...-

PTU-009 UPPER GASTROINTESTINAL INFLAMMATION IN PATIENTS WITH IMMUNE-CHECKPOINT INHIBITOR INDUCED DIARRHOEA

Introduction Immune Checkpoint inhibitors (ICPi) have revolutionised the management of melanoma, non-small cell lung cancer and renal cancer. They block receptors expressed by immune cells that reduce immune activation. ‘Turbo-charged’ immune cells deliver augmented anti-tumour immunity (hence the striking efficacy of these anti-cancer agents), but comes at the cost of immune mediated side effects. Immune-mediated damage to the gut is a common and serious side effect of ICPi therapy. Endoscopic and histological findings in the lower gastrointestinal (GI) tract have been described (colitis is a common feature), but little is known about manifestations in the upper GI tract.

Methods We performed a retrospective analysis of all patients presenting with diarrhoea following treatment with ICPis (pembrolizumab, nivolumab, pembrolizumab or combination therapy) who had been investigated with OGD. Endoscopic and

indications but had a normal colonoscopy and normal histopathology.

In patients with UC, disease severity was assessed using the Mayo Scoring System for assessing UC activity. Serum IL-23 level was quantified using Quantikine Human IL-23 Immunoassay by R and D Systems Europe, Ltd. ELISA kit. IL-23 levels were compared in the 2 groups, also correlation with severity was obtained.

Analysis of the data was done using SPSS (Statistical System for Social Science version 16). Kruskal Wallis test was used to compare the 2 groups regarding quantitative nonparametric variables. Spearman correlation was used to rank variables positively or inversely. Receiver operating curve (ROC) was used to find the best cut off and validity of IL-23. The one-way ANOVA test was used to assess the relationship between the severity of UC and IL-23 levels.

Results Patients with UC had higher level of interleukin 23 (234.5±161 pg/mL) compared to controls (54.2±15 pg/mL). A positive correlation was found between the level of IL-23 and disease severity. A cut off value of IL-23=68 pg/mL was the best to differentiate between cases and controls. Performing the receiver operating characteristic curve (ROC) revealed the best cut off values of IL-23 to identify the severity of ulcerative colitis were 105 pg/mL for mild cases (80% sensitivity), 200 pg/mL for moderate cases (60% sensitivity), and 270 pg/mL for severe cases (81% sensitivity).

Conclusion Our findings reinforce the suggestion that IL-23 level measurement may be as value of a non-invasive test in the diagnosis and disease severity assessment in patients with UC. Further studies on a larger scale would be needed to evaluate whether this could be used for monitoring of response to treatment. In view of IL-23 antagonists currently being studied in UC patients, the predictability of response to IL-23 antagonists guided by IL-23 levels is an area that could be explored.