therapy is effective in the majority of patients, whether directed at the IBD or the PG.

PMO-45 FAECAL CALPROTECTIN, AN ALTERNATIVE MARKER TO ESTIMATE CUMULATIVE INFLAMMATORY BURDEN IN ULCERATIVE COLITIS

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Introduction Long-term Ulcerative Colitis (UC) increases the risk of colonic dysplasia and colorectal cancer (CRC). We aim to establish whether real-world faecal calprotectin (FCP) data can be used to estimate the cumulative inflammatory burden (CIB) and identify those at risk of dysplasia and CRC.

Methods Patients with left sided or extensive UC of >8 yrs duration, with >1 endoscopy and >1 serial FCP value (from 2005) were extracted from the NHS Lothian IBD registry. Patients with PSC were excluded.

CIB scores based on histology (CIB(H)) or FCP (CIB(FCP)) were calculated based on the method proposed by Choi et al.¹ Patients were categorised into three groups; IBD-associated dysplasia and CRC (IBD-D/CRC n=15), only sporadic adenomas (n=29, excluded from further analysis) and patients who did not develop any type of dysplasia (n=220).

To give a more accurate estimation of cumulative inflammation FCP levels were defined as low (n=73) or high (n=162). High CIB(FCP) is equivalent to 5 yrs of a continuous FCP value of $\geq 250\mu\text{g/g}$, a surrogate marker of chronic active inflammation.

Results A defined cohort of 264 patients (146 males), with a median age 36 (IQR 27.1-46.9) were included.

Using the CIB(H) score, patients with no dysplasia (n=220) had a median score of 4.7 (IQR 2.7-7.9), compared with patients with IBD-D/CRC (n=15) who had a score of 5.4 (3.5-8.2) (p=0.4405, unpaired two-tailed t-test).

The median CIB (FCP) score for patients with no dysplasia was 1804 (883-3689), compared with patients with IBD-D/CRC who had a median score of 2256 (1593-3848) (p=0.4835). The correlation between the two types of CIB scores in identifying risk of IBD-D/CRC was weak (Spearman's rho=0.296 (p<0.001). In this cohort neither score was able to predict IBD-D/CRC.

To give a more accurate estimation of CIB(FCP) the rates of IBD-D/CRC were stratified by FCP levels over time; 73 patients (31.1%) had low CIB(FCP) and 162 (68.9%) had a high CIB(FCP). Using this model, 1/73 (1.4%) in the low CIB (FCP) group and 14/162 (8.6%) in the high group had IBD-D/CRC (p=0.0417, Fishers Exact Test), figure 1. Figure 1: low/high CIB(FCP)

Conclusions This uncontrolled cohort study suggests that serial faecal calprotectin measurements can be used to estimate the cumulative inflammatory burden. Patients with chronic UC who have a high CIB (FCP) score were more likely to develop IBD-D/CRC, but there was only weak correlation between CIB(H) and CIB(FCP). Further data is required to validate our findings.

REFERENCE

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PMO-46 HEALTH-RELATED QUALITY OF LIFE IN PATIENTS WITH CHECKPOINT INHIBITOR ENTEROCOLITIS

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Introduction Immune checkpoint inhibitors (CPI) have transformed the treatment of many advanced cancers but cause immune related adverse events including enterocolitis (CPI-E). The conventional inflammatory bowel diseases ulcerative colitis (UC) and Crohn's disease (CD) are associated with unfavourable health-related quality of life (HRQoL) outcomes, but there are currently no data on HRQoL in the setting of CPI-E. This study aimed to investigate HRQoL in CPI-E.

Methods A prospective study was conducted across two London hospital trusts between February-April 2021. UC, CD and CPI-E patient cohorts were recruited from outpatient clinics and the biologic infusion unit. Disease activity was assessed using non-invasive scoring systems: modified-Partial Mayo Score (m-PMS), modified-Harvey Bradshaw Index (m-HBI), Simple Crohn's and Colitis Activity Index (SCCAI) and Common Terminology Criteria for Adverse Events (CTCAE). HRQoL outcomes were assessed using validated questionnaires: Patient Health Questionnaire-8 (PHQ-8), Generalised Anxiety Disorder-7 (GAD-7), IBD-Questionnaire (IBD-Q) and Multidimensional Assessment of Fatigue (MAF).

Results Seventy-five patients (33 CD, 21 UC, 21 CPI-E) were recruited. 33 CD patients (100%) and 20 UC patients (95.2%) were receiving biologic therapy. Thirteen CPI-E patients (61.9%) received Anti-PD1/PDL1 monotherapy and (38.1%) received combination anti-PD1 and anti-CTLA-4 therapy. Twenty-four CD patients (72.7%), 11 UC patients (52.4%) and 16 CPI-E patients (76.2%) were shielding due to the COVID-19 pandemic. Using m-PMS, m-HBI, SCCAI and CTCAE, >80% in each of the three cohorts were either classed as being in remission or having mild disease activity. Three CPI-E patients (14.3%) had moderate depression (PHQ-8 ≥ 10) and a further 9 (42.9%) had mild depression (PHQ-8 score 5-9). Nine CPI-E patients (42.9%) had significant fatigue (MAF score ≥ 30) and 6 (28.6%) had mild or moderate anxiety (GAD-7 ≥ 5). There were no significant differences in PHQ-8, GAD-7, IBD-Q and MAF between CPI-E, CD and UC patients, suggesting comparable levels of psychological morbidity in the three groups. Significant correlations were found between CPI-E disease activity and IBD-Q and GAD-7 scores.

Conclusion Our study suggests that psychological morbidity in CPI-E is common and comparable to rates in CD and UC, even in the setting of clinical remission. Clinicians should be aware of this complication and take a holistic approach to this patient group.