

bowel diseases (IBD), are typically dosed according to patient's body weight. A previous meta-analysis showed higher remission rates in patients with "therapeutic" levels of 6-thioguanine (6-TGN), but weight based dosing correlates poorly with 6-TGN levels (1). 6-TGN testing is not universally available, results are not available immediately and repeated measurements are necessary to ensure dose adequacy and adherence to therapy. Proxy measures such as mean corpuscular volume (MCV) and lymphocyte count (LC) have been advocated as markers of dose adequacy. We aimed to analyse the relationship between 6-TGN levels, MCV, LC and other putative surrogate markers of therapeutic 6-TGN levels.

Methods This retrospective study was conducted at the Royal Liverpool University Hospital. All patients who had concurrent measurements of 6-TGN and full blood count were included in the analysis. 6-TGN levels were classed as sub-therapeutic (<230), therapeutic (230–450) or supra-therapeutic (>450). The association between 6-TGN, patient demographics, MCV, LC and other putative surrogate markers was estimated using a multivariable linear regression model for continuous 6-TGN and a proportional odds logistic regression model for the ordered 6-TGN levels. All results were declared statistically significant if $p < 0.05$.

Results A total of 106 patients (48 male, 58 female) were included and contributed 133 measurements. Of these patients 58 (55%) had Crohn's disease and 47 (44%) had ulcerative colitis. The mean azathioprine dose was 123.5 mg (SD 73.8) or 1.70 mg/kg (SD 0.67). After adjusting for other variables, a one unit increase in MCV, was associated with a 10.88 unit increase in 6TGN levels, Figure 1 (95% CI: 7.63 and 14.014, $p < 0.0001$) and a one unit increase in ALT was associated with a 2.67 unit decrease in 6TGN levels (95% CI: 0.36 to 4.97 $p = 0.0237$). There was no correlation between LC, NC, WCC or ALKPHOS and 6-TGN levels.

Conclusion MCV and 6-TGN nucleotide levels increase together. If 6-TGN levels are not available, MCV can be used as a crude but imperfect surrogate marker of dose adequacy and toxicity.

REFERENCE

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Disclosure of Interest None Declared.

PWE-079 DEXA RATES AND OUTCOMES IN AN IBD POPULATION COHORT.. LESSONS LEARNT

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Introduction Osteoporosis is one of the under diagnosed and undertreated conditions worldwide. It is estimated that 1 in 3 women and 1 in 5 men in Ireland are diagnosed with it above the age of 50 years and will be likely to become more common with the increased life expectancy.

In our study, we aimed to assess the rate of screening with DEXA scans for this condition in a prospective IBD cohort and to evaluate the results. We also studied possible factors that may influence DEXA rates.

Methods As part of two decades follow up study of a multi-centre Irish IBD prospective cohort from the early 1990's that

was part of European Collaborative Study on IBD (EC-IBD), patients were traced and interviewed. There were 126 IBD patients from the Greater Dublin area who consented and completed the study questionnaire, following Ethical committees' approvals. In this questionnaire we evaluated DEXA frequency and possible factors that may influence it; including patient diagnosis, age, gender, family history of IBD, courses of steroids, social class, total years of education, attending gastroenterologist or a surgeon, years of loss to follow up (LTFU) and membership to the national IBD patient support group (Irish Society of Crohn's Colitis ISCC).

Results were analysed with logistic regression and forward stepwise analysis using R program 3.0.1 software, taking p value < 0.05 to be statistically significant.

Results Of the total 126 patients only 58 (46.03%) patients had DEXA scans performed. Of those 67.44% had CD and 33.73% had UC. When evaluating DEXA results osteoporosis was diagnosed in 26.67 and 21.43% of CD and UC patients respectively. Osteopenia was diagnosed in 43.33% CD and 42.86% of UC patients. About 30% of remaining scanned patients had normal DEXA. Logistic regression analysis showed that patients with positive family history of IBD and longer years of education were more likely to have had a scan with $P = 0.024$ and 0.049 respectively. Other possible risk factors didn't reach statistical significance. Patients who were less compliant and LTFU were less likely to get DEXA with $p = 0.045$ in CD and $p = 0.0336$ in UC group.

Conclusion Osteoporosis is an increasingly recognised condition and recently has been considered as one of the extra intestinal manifestations of IBD. Patient and doctor awareness is paramount to screening and diagnosis. Our study showed that CD patients were more likely to have DEXA scans during their disease course. The rate of osteoporosis was higher in CD patients, despite their fewer numbers when compared to UC group. Over 40% of IBD patients had osteopenia. Early detection and appropriate management will help to reduce fracture risk, improve patient quality of life in a cost effective manner.

Disclosure of Interest None Declared.

PWE-080 BEWARE THE INTERACTION BETWEEN THIOPURINES AND WARFARIN

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Introduction It is not uncommon for patients to require both immunosuppression and anticoagulation and for warfarin and thiopurines to be prescribed concurrently. There is limited evidence that thiopurines can inhibit the actions of warfarin. This potential interaction needs to be addressed when monitoring patients established on warfarin as they commence thiopurines or change dose. IBD patients are increasingly changed to combination low dose thiopurine and allopurinol for high methylmercaptopurine: thioguanine nucleotide (MeMP:TGN) ratio to optimise thiopurine efficacy. However, allopurinol also may potentiate warfarin and this could further exacerbate the effect of Azathioprine/mercaptopurine dose lowering on warfarin activity.

Aim To raise awareness of risk of harm from a clinically important interaction between thiopurines and warfarin +/- allopurinol.