Further work is required to explore why FC concentrations are lower in proximal disease despite presence of active inflammation.

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Disclosure of Interest None Declared.

PWE-117 HAVE PERIANAL SURGERY RATES DECREASED WITH THE RISE IN THIOPURINE USE IN CROHN'S DISEASE?

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Introduction Although thiopurines (TPs) have proven efficacy in the maintenance of remission in Crohn's disease (CD) and may reduce the need for intestinal surgery, their impact on perianal disease is not firmly established since previous trials have not evaluated the efficacy of TPs on perianal disease as a primary endpoint. Our aim was to examine the temporal trends in perianal surgery and TP use using the Clinical Practice Research Datalink (CPRD).

Methods Using electronic primary care records, we performed a UK population based study. Incident cases of CD were identified between 1995 and 2009 from the nationally representative CPRD which contains clinical records and prescribing data for 13 million people in the UK and is a validated research database. Patients were included if they had been registered with a practice for greater than 12 months. The primary endpoint was first perianal surgery defined by READ/OXMIS coding. The cohort was divided into two defined historical era; era 1 (1995–2002) and era 2 (2003–2009). We performed Kaplan-Meier survival analysis to establish the 5 year rates of first perianal surgery and trends in TP prescribing by era of diagnosis. Log-rank test for trend was used to compare survival outcomes between groups.

Abstract PWE-117 Figure 1

Results 5235 patients met the diagnostic criteria for an incident case of CD. 2083 were diagnosed in era 1 (1995–2002) and 3152 in era 2 (2003–2009). The mean duration of follow up was 4.8 years/person. 56.3% of patients were female and median age at diagnosis was 38.5 years (IQR: 24.8–58.1 years). 124 patients underwent perianal surgery. The overall 5 year rate of perianal surgery was 2.2% (95% CI: 1.8–2.7%). Stratified by era of diagnosis the rate was lower in the more recent era: 2.7% (95% CI: 2.1–3.6%) and 1.7% (95% CI: 1.2–2.3%) in era 1 and era 2 respectively (log-rank test for trend $p = 0.03$). Conversely, during the same period, the 5 year cumulative probability of receiving a TP increased between era 1 and era 2 from 29.1% to 42.2% (log-rank test for trend $p < 0.001$).

Conclusion Over the 15 year study period, the risk of perianal surgery fell by one third which coincided with a one third increase in TP use during the same period. Other changes in IBD management are also likely to have contributed to this fall in surgery. Further studies to determine independent risk factors associated with perianal surgery are in progress.

Disclosure of Interest None Declared.

PWE-118 PREDICTORS OF COLECTOMY AND THE IMPACT OF THIOPURINES ON THE RISK OF COLECTOMY IN ULCERATIVE COLITIS – A NATIONAL UK BASED OBSERVATIONAL STUDY

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Introduction Thiopurines (TPs) including azathioprine and mercaptopurine have an established role in maintaining disease remission in ulcerative colitis (UC) but their impact on the risk of colectomy remains unknown. Our aim was to establish predictors of colectomy and determine the effect of TPs on the risk for colectomy using the Clinical Practice Research Datalink (CPRD).

Methods We conducted a population based study using electronic primary care records in the UK. We identified incident cases of UC between 1989 and 2009 in the CPRD which contains prescribing and clinical data for 8% of the UK population and is a validated research database. Patients were included if registered with a practice for at least 12 months prior to diagnosis. We compared rates of colectomy between TP users and non-users and examined the impact of treatment duration. We performed survival analysis using the Kaplan-Meier method. Independent risk factors for surgery were determined using a multivariable Cox proportional hazards model.

Results Overall, 8673 patient met our inclusion criteria of which 479 (5.5%) went on to have a total colectomy during 21 years of follow up. 51.4% were male and the median age was 46 years (IQR: 32–62 years). Female patients were less likely to undergo colectomy (HR 0.70, 95% CI: 0.58–0.84, $p < 0.001$). There was a threefold increase in the risk of colectomy amongst TP users compared with non-users (HR 3.48, 95% CI: 2.84–4.37, $p < 0.001$). Of the TP users, those receiving greater than 12 months of treatment, were least likely to undergo colectomy compared with users for less than 3 months (HR 0.29, 95% CI: 0.21–0.40, $p < 0.001$). Early steroid users were almost twice as