PWE-031

THE PREVALENCE OF ABNORMAL HEPATIC BIOCHEMISTRY AND HEPATOBILIARY MORBIDITY IN A COHORT OF PATIENTS WITH INFLAMMATORY BOWEL DISEASE

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Introduction There is a recognised association between Inflammatory Bowel Disease (IBD) and both abnormal hepatic biochemistry and hepatobiliary morbidity. Hepatic steatosis, primary sclerosing cholangitis (PSC), cholelithiasis and drug reactions have all been linked, but the nature of the association and risk factors are unclear. The aims of this study were: (1) to assess the prevalence of, and risk factors for abnormal biochemistry in a cohort of patients with IBD; (2) to determine the prevalence of hepatobiliary morbidity in those patients with abnormal liver function tests (LFTs).

Methods Ethical approval was obtained to take demographic and clinical data retrospectively from the IBD database of a secondary/tertiary referral centre, entered prospectively from January 2006 to September 2009. IBD diagnosis was based on endoscopic, radiological and histological criteria and disease phenotyping was according to the Montreal classification. Abnormal hepatic biochemistry was defined as elevation above the laboratory upper limit of normal for ALT (>40 IU/l) and/or ALP (>130 IU/l) and/or Bilirubin (>17 mmol/l) at time of entry into the database. Fishers Exact and Mann-Whitney U tests were used.

Results Of 493 patients in the database, 370 (75%) had hepatic biochemistry available. Of these, the prevalence of abnormal hepatic biochemistry was 17.8% and 10.8% had abnormal ALT. African-Caribbean patients had a high prevalence of abnormal hepatic biochemistry (11/23, 48%, p=0.001), in contrast to South Asian patients (5/49, 10%, p=0.16) and White British patients (24/152, 15.8%, p=0.4). Overall, there was no association with age, sex, diagnosis (Crohn's or Ulcerative Colitis), disease phenotype or use of Azathioprine or Infliximab. Hepatobiliary morbidity was identified in 18/64 (28%) of those with abnormal LFTs. 6 patients (1.6%) had PSC, of whom 5 had raised ALP.

Conclusion More than one in six patients with IBD in this cohort had abnormal hepatic biochemistry and of these, over a quarter had identifiable hepatobiliary morbidity. Surprisingly, the prevalence of abnormal LFTs was higher than expected in African-Caribbean patients and low in South Asians. IBD type and phenotype was not associated with abnormal liver biochemistry. Confirmation and further evaluation of these findings should be sought prospectively in an independent cohort.

Competing interests None.

Keywords aminotransferase, biochemistry, liver, morbidity.