IS VARICEAL BLEEDING INCREASING WITHIN THE UK POPULATION?

doi:10.1136/gut.2011.239301.18

C J Crooks,1,* J West,1 T Card1,2 1Epidemiology and Public Health, University of Nottingham, Nottingham, UK; 2Sherwood Forest Hospitals NHS Trust, Mansfield, UK

Introduction  The incidence of cirrhosis and mortality from chronic liver disease is increasing, but it is not known whether hospitalisations for variceal bleeding are also increasing. In contrast, hospitalisations for peptic ulcer bleeding are believed to be decreasing due to falling H. pylori and peptic ulcer prevalence. Yet in the UK during the 1990s non variceal hospitalisation rates remained unchanged, and even increased in the elderly, possibly as a consequence of aspirin and NSAID use.1 We therefore aimed to accurately determine trends in hospitalisation rates of variceal haemorrhage and compare these to the current trends of non-variceal haemorrhage.

Methods  We used hospital episodes statistics which contain all admissions within England, and identified the number of upper gastrointestinal bleeds according to ICD 10 codes between 1999 and 2007. We used the Office of National Statistics mid-year population estimates to derive the population denominators by age and sex. Changes in hospitalisation rates were adjusted for age and sex using Poisson regression.

Results  313,111 admissions were identified with a primary diagnosis of upper gastrointestinal haemorrhage. Of these 302,492 (97%) were non-variceal bleeds, and 10,619 (3%) were variceal bleeds (see table 1). Even after adjusting for age and sex there was no increase in the hospitalisation rate of variceal haemorrhage test for trend (p = 0.5). In contrast, there was a slight 0.6% annual increase in the hospitalisation rate of non variceal haemorrhage that persisted despite adjusting for age and gender (annual increase in hospitalisation rate of 0.2%, 95% confidence interval 0.1–0.4%, p = 0.001).

Conclusion  Hospitalisation rates of variceal haemorrhage are not increasing despite the observed increase in cirrhosis. This
could be because of better primary and secondary prevention of bleeding or from the diagnosis of cirrhosis at an earlier stage of the disease process. Patients presenting with upper gastrointestinal haemorrhage are admitted acutely to hospital as standard practice within England so these hospitalisation rates are a useful proxy for population based incidence rates.

**Competing interests** None.

**Keywords** epidemiology, gastrointestinal bleeding, gastrointestinal haemorrhage, hospital episode statistics, variceal bleeding.

**REFERENCE**