OC-018 IS VARICEAL BLEEDING INCREASING WITHIN THE UK POPULATION?

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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

Table 1 OC-018 Numbers and hospitalisation rates for variceal and non variceal haemorrhage in England

Year	Variceal haemorrhage Number of admissions	Hospitalisations per 100,000 per year	95% CI	Non variceal haemorrhage Number of admissions	Hospitalisations per 100,000 per year	95% CI
1999	1131	2.9	(2.7 to 3.0)	32025	80.8	(79.9 to 81.7)
2000	1163	2.9	(2.8 to 3.1)	32561	81.7	(80.8 to 82.5)
2001	1099	2.7	(2.6 to 2.9)	32165	80.1	(79.2 to 81.0)
2002	1139	2.8	(2.7 to 3.0)	32348	80.0	(79.1 to 80.9)
2003	1177	2.9	(2.7 to 3.1)	33712	82.8	(81.9 to 83.7)
2004	1274	3.1	(2.9 to 3.3)	34548	84.2	(83.4 to 85.1)
2005	1160	2.8	(2.6 to 3.0)	35422	85.5	(84.6 to 86.4)
2006	1254	3.0	(2.8 to 3.2)	35076	84.0	(83.1 to 84.9)
2007	1222	2.9	(2.7 to 3.1)	34635	82.3	(81.4 to 83.1)

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

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