Hepatitis E in the North East of England: a 5 year review of cases admitted to a tertiary centre

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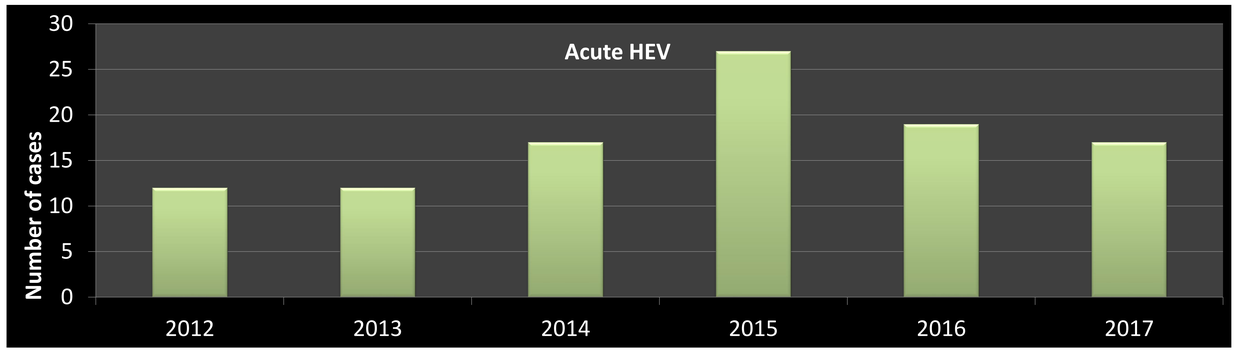
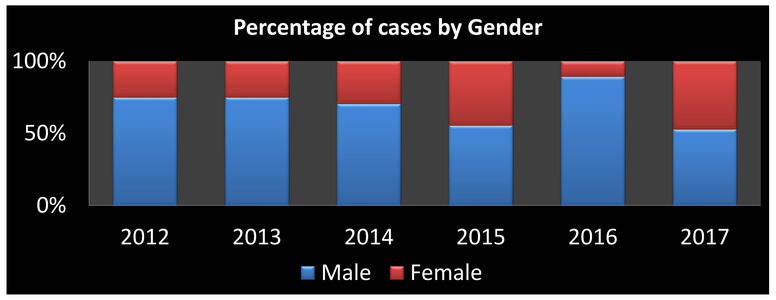
Background

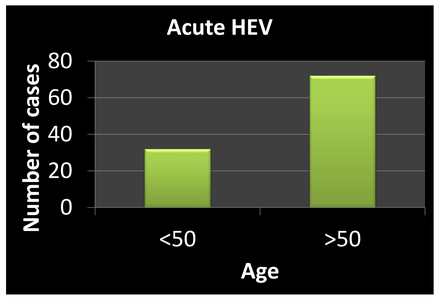
The incidence of Hepatitis E virus (HEV) infection has risen sharply in Europe in last decade, largely due to a rise in indigenous genotype 3 infections. Few studies have determined the clinical outcomes of HEV infection in the UK. Our aim was to review all cases of hepatitis E admitted to our unit in 5 years to determine the clinical consequences of these infections.

Methods

All confirmed serological cases of HEV (IgG, IgM & RNA) between Jan 2012 & Sept 2017 were identified from our virology laboratory. Medical notes of all acute or chronic cases were reviewed retrospectively to determine epidemiological characteristics, clinical features and outcomes of the infections.







Results

From a total of 206 cases had serological evidence of HEV infection, 104 were confirmed acute HEV (IgM and/or HEV RNA positive). The number of cases/year ranged from 12-27. The median age at presentation was 54 (21-94) years and 70% were >50 years. 68% of cases were male. 24% of acute HEV cases occurred in immunocompromised individuals. 60% of the patients developed jaundice and the median bilirubin levels was 70 (4 - 558) µmol/L. 2 patients had bilirubin >500 µmol/L. The median ALT level was 1084 (range 22-6026) U/L. Serum ALT levels >500 in 57% and >5000 in 3%. No cases of fulminant liver failure were seen.

8 cases became chronic (HEV viraemia >3 months), all in immunocompromised individuals (50% haematological malignancies 50% solid organ transplants). All 8 patients were treated with ribavirin with 5 (63%) achieving sustained virological response. One patient with a delayed diagnosis of HEV developed progressive liver failure and required Liver transplantation despite ribavirin. One relapsed following 3 months ribavirin and then was a non-responder to 6 months ribavirin and 6 months PEG-interferon + ribavirin. One was non-responder to 18 months ribavirin.

Conclusion

Symptomatic HEV is relatively common in the North East of England leading to jaundice and significant transaminitis in the majority. Chronic infection developed in a quarter of immunosuppressed individuals and can progress to clinically significant disease.

This presenter has the following declarations of relationship with industry: NONE