

P0501 A significant decline in the prevalence of hepatitis B virus e-antigen-negative chronic hepatitis B infection in the period 1997-2010 in Slovenia

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Background: In the majority of cases the infection with hepatitis B virus (HBV) without e antigen (eAg) is a consequence of pre-core mutations. It is most prevalent in the Mediterranean countries (31.7%-89%) whereas in the Central and Northern European countries its prevalence varies between 30%-66.4%. So far, no data on HBeAg prevalence in patients with chronic HBV infection from Slovenia has been available. The aim of the present study was to determine for the first time the prevalence of HBeAg-negative chronic HBV infection and analyse potential trends over the period 1997-2010 in Slovenia.

Materials/methods: All HBV surface antigen (HBsAg) positive patients from all regions of Slovenia, registered in a database of the national referential laboratory for viral hepatitis, whose blood samples were tested for HBeAg between January 1997 and December 2010, were included. Available epidemiological, virological and clinical characteristics were reviewed from the medical documentation. Association between patients' characteristics and HBeAg was tested using univariate and multiple logistic regression, likelihood ratio or Mann-Whitney U test, as appropriate, and possible trends during the observational period were determined.

Results: Out of 1.160 patients included, 678 (58.4%) were males. 992 (85.5%) were HBeAg-negative, males being significantly predominant in HBeAg-positive group ($p=0.003$). HBeAg-positive persons were significantly younger compared to HBeAg-negative ones (mean age \pm SD 35.5 \pm 16.7 vs. 40.6 \pm 12.9 years, respectively) ($p<0.001$). Risk sexual behaviour was reported significantly more common in HBeAg-positive group ($p<0.001$). A significantly negative trend in the annual number of HBeAg-negative persons was observed in the studied period ($p<0.001$), while there was no statistically significant trend in the annual number of HBeAg-positive persons ($p=0.829$), respectively (Figure).

Conclusions: High prevalence of HBeAg-negative chronic HBV infection in Slovenia is comparable to other Mediterranean countries. A significant decline in the prevalence of HBeAg-negative chronic HBV infection over the observational period might reflect the changes in global epidemiology of HBV infection due to new travel and sexual habits as well as massive migrations.

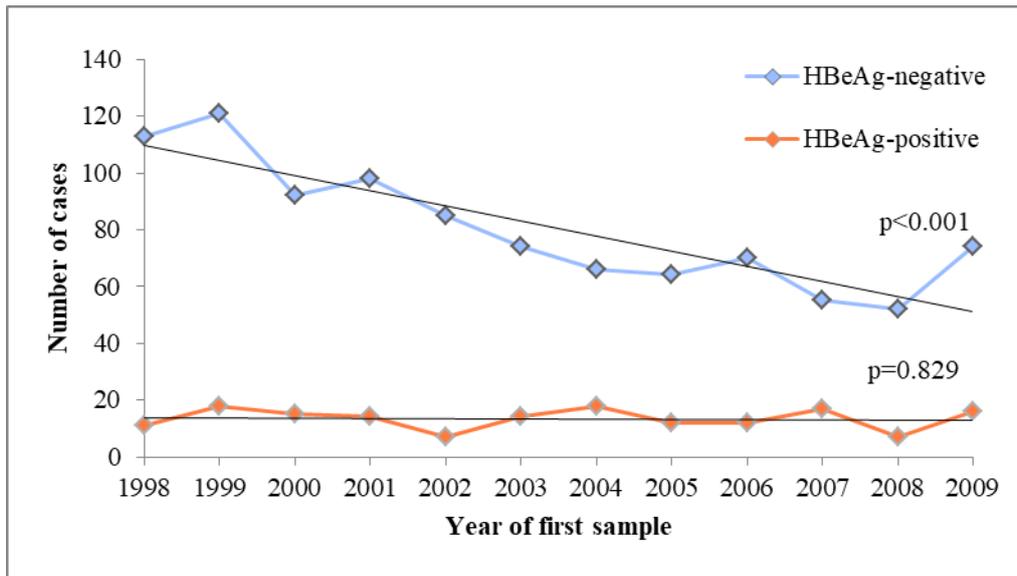


Figure: Trends in the annual number of e antigen-negative and e antigen-positive hepatitis B chronically infected persons in Slovenia (N=1.160).