

SEROEPIDEMIOLOGICAL SURVEY OF HEPATITIS E VIRUS INFECTION AMONG HAEMODIALYSIS NURSING STAFF IN ATHENS, GREECE

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INTRODUCTION AND PURPOSE

Patients undergoing chronic haemodialysis (HD) have an increased risk of exposure to Hepatitis E Virus (HEV). Data among chronic HD patients in Greece confirm higher anti-HEV prevalence rates (6.4%) compared to age- and gender-matched healthy volunteers (2.2%) or healthy blood donors (<1%). There are no data concerning haemodialysis nursing staff that is responsible for their nursing care. The aim of the study was to determine the prevalence of anti-HEV among haemodialysis nurses in Athens, Greece.

METHODS

- Blood sample from 195 haemodialysis nurses working at 18 haemodialysis units in Athens metropolitan area was taken and tested for anti-HEV (IgG), hepatitis B virus serological markers (HBsAg, anti-HBc, anti-HBs) and anti-HCV.
- Consenting individuals completed an anonymous information sheet which included
 1. their demographic information
 2. their HBV vaccination status
 3. non- occupational risk factors for hepatitis
 4. history of jaundice
 5. exposure to blood or body fluids after a percutaneous or permucosal injury.
- Each individual was allocated a study code, which was printed on the information sheet and one label used to attach to the blood sample tube.

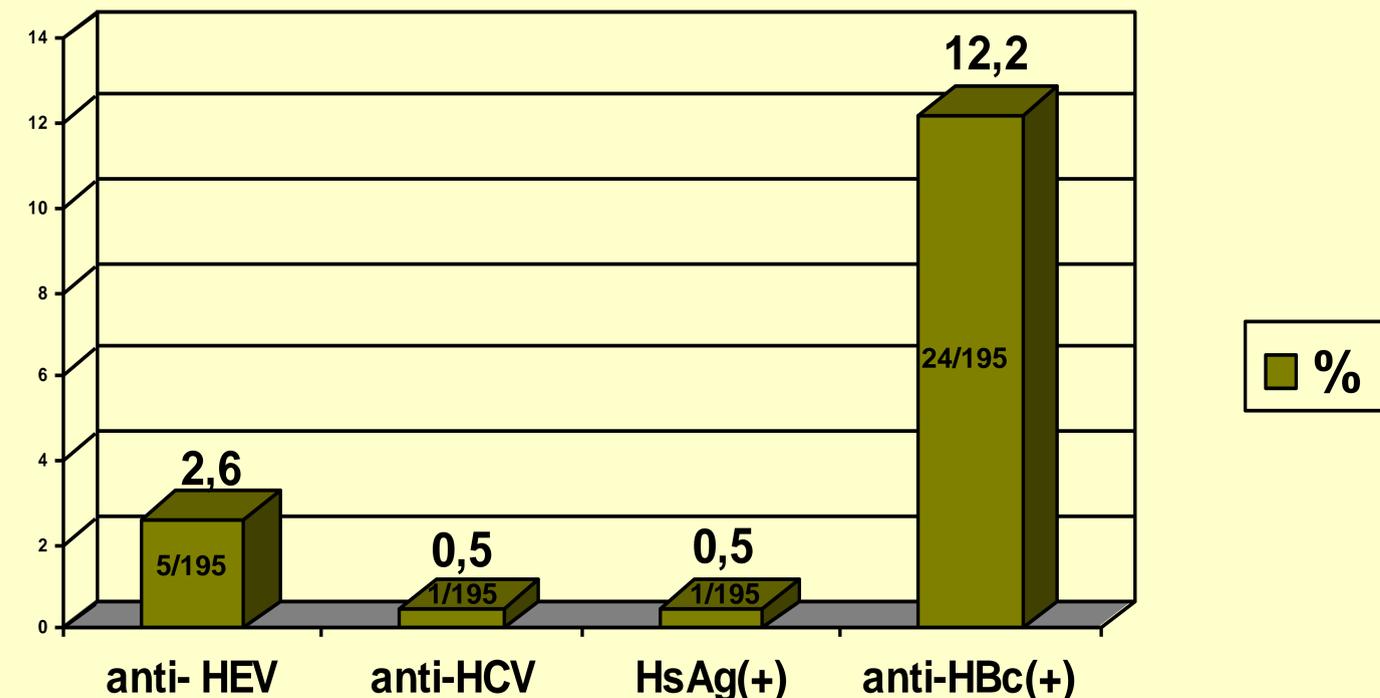
CONCLUSIONS

The prevalence of anti-HEV in the haemodialysis nursing staff (2.6%) is higher than that observed in healthy blood donors (<1%) and comparable to that observed in healthy volunteers (2.2%), but lower to haemodialysis patients (6.4%) in Athens, Greece. However, long-term prospective studies are needed in order to identify whether intra-unit factors are also responsible for the observed prevalence.

RESULTS

Five out of 195 haemodialysis nurses evaluated were found anti-HEV positive (2.6%). The prevalence of HBsAg and anti-HCV were 0.5% (1/195) and 0.5% (1/195) respectively, whereas the prevalence of anti-HBc was 12.2% (24/195). It is important to note that anti-HBs positivity was observed in 88.2% (172/195) of haemodialysis nurses. A marginal association of anti-HEV positivity was observed with the age of the participants ($p=0.001$), the years of working at HD unit ($p=0.034$), the total working experience ($p=0.017$), the history of jaundice ($p=0.006$) and the presence of anti-HBc positivity ($p=0.001$). However, none of the above mentioned parameters were positively associated with the anti-HEV positivity in the multivariate analysis.

Prevalence of viral hepatitis markers among hemodialysis nursing staff



DISCLOSURE

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