

HIGH PREVALENCE OF HDV INFECTION IN MONGOLIA

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Introduction: Mongolia has one of the highest prevalence of hepatitis B and C. Consequently, leading mortality rates of liver cirrhosis and hepatocellular carcinoma in the world. In clinical practice it is thought that HDV infection is on the rise. However, HDV infection was not formally studied in Mongolia.

Aim of study: To study the prevalence of HDV infection in Mongolia

Method and subject: Study subjects were chosen based on two-stage cluster random sampling method. Total of 1,158 "healthy" subjects (20-70 ages) were enrolled in this study. 599 (43.1%) of them men and 659 (56.9%) female. All participants on-site tested for HBsAg using rapid tests (CTK Biotech, San-Diego, US). Also, 5-10ml of blood was drawn from antecubital vein and sera were separated following a standard protocol. Rapid test positive tested subjects' serum specimens were tested for HBsAg, anti-HD-Ab and HD-Ag by enzyme-linked immunosorbent assay (Diasorin, Italy). All anti-HDV positive serum tested for HDV-RNA by RT-PCR.

Results: The overall prevalence of HBsAg among study subjects were 10.6% (123/1158). From 123 HBsAg positive subjects 83 were tested positive for HD-Ab (67% of HBsAg positive population and 7.2% of total population) and 8 subjects were tested positive for HD-Ag (6.5% of HBsAg positive population). From 83 anti-HDV positive tested serum, there was positive tested HDV-RNA in 51 serum. This mean is that prevalence rate of active HDV infection 4.5 % in total population.

Conclusion: Prevalence of HBV infection in adults is high rate in Mongolia. HDV infection is alarmingly high in Mongolian population. It indicates that there is an urgent need for concerted action from all stakeholders within the Mongolian healthcare system.