

The incidence of viral hepatitis and HIV infection in pregnant women in South-Backa District

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Introduction

Viral hepatitis and HIV are diseases that can occur during pregnancy and then threaten health of both mother and fetus. In infection with HBV, HCV and HIV vertical transmission of the virus is possible, while the HEV infection increases the risk of miscarriage, development of fulminant hepatitis and death of pregnant woman.

Aim

The aim of the research is to determine the prevalence of HBV, HCV, HEV and HIV infections in pregnant women in South-Backa District.

Material and methods

During the ten years period, 31778 pregnant women of South-Backa District were monitored for HBV, HCV and HIV. Detection of HbsAg with Microelisa test (Hepanostika R HBsAg Ultra, BioMerieux, France) was used as marker for HBV infection. To detect specific antiHCV antibodies was used ELISA test, Hepanostika R HCV (Ultra Beijing United Biomedical Co. Ltd. Shanghai, China). When the findings were found to be reactive Western blot confirmation test (Inno-LIA HCV Score, Innogenetics, Belgium) was applied. Detection of HIV infection is completed by ELISA test (Vironostika R HIV Uni-Form II Ag/Ab bioMerieux SA, France) and reactive sera were confirmed by Western blot confirmatory test (New Lav Blot 1, BioRad, France). During 2010, 73 pregnant women were examined to HEV IgG by ELISA test (EIAgen HEV IgG Kit, third generation Adaltis, Italia S.p.A.).

Results

Test to HbsAg included 28842 pregnant women and 3.4% of them were positive. Antibodies to HCV were proven at 4% of 512 examined pregnant women. Test to HIV included 2434 pregnant women and infection was not proved in any single case. Presence of specific IgG antibodies to HEV were proven at 2 pregnant women. It was found that there is statistically significant difference in number of pregnant women tested for HBV compared to those tested to HCV and HIV ($p < 0.05$). It was noted the number of tested pregnant women for HBV, HCV and HIV increased over the years, the biggest growth was observed in the test for the HBV.

Conclusion

Early detection of HBV, HCV and HIV in pregnant women is important for timely assessment of whether the pregnancy should be terminated or treated appropriately to prevent intrauterine or perinatal infection of the fetus. Control of Hepatitis E virus is important because it is known that infection with HEV infection during pregnancy increases the risk of fetal loss and development of fulminant hepatitis leading to death of pregnant woman.

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