

EV0100

ePoster Viewing

Viral molecular epidemiology (other than hepatitis & HIV)

Occult hepatitis B: epidemiological and molecular characterization in anti-HBc isolated individuals in Brazil

Alcione Santos*¹, Juan Miguel Villalobos Salcedo², Deusilene Souza Vieira²

¹*Fundação Oswaldo Cruz, Laboratório de Virologia, Porto Velho, Brazil*

²*Fundação Oswaldo Cruz, Porto Velho, Brazil*

Background: The occult HBV infection is defined as the presence of HBV DNA on the liver (with or without HBV DNA in serum) in subjects negative for HBV surface antigen (HBsAg). Depending on the detected antibodies, occult infection may be classified as seropositive individuals (anti-HBc and / or anti-HBs positive) or seronegative (anti-HBc and anti-HBs negative). The anti-HBc isolated was reported a predisposing factor for occult HBV infection, but its real meaning is still unknown. This study aims to epidemiological and molecular characterization of this serologic standard, aiming to contribute to understanding of occult infection and to elucidate the molecular mechanisms that may be contributing with the change in HBsAg expression.

Material/methods: Were selected 150 samples of individuals with anti-HBc alone and submitted to screening of the HBV-DNA by real-time PCR. Were collected as prognostic factors of the patients with anti-HBc isolated: age and sex. Also in positive samples for occult infection dosing was held in transaminases (AST and ALT). We then carried viral load quantification of amplified positive samples and a corresponding 1300pb fragment of partial region S / POL the gene for genotyping of samples. Statistical analyzes were done using GraphPad Prism 5.0 software (GraphPad Software, Inc., California, USA).

Results: Frequency it was observed in 28% (42/150) of occult infection in samples with anti-HBc isolated. The average viral load of 3.4 log₁₀ IU / mL. The data presented related to the clinical profile individuals with anti-HBc isolated suggest that this one serologic default is to relatively common, regardless of age or sex, in which of the 150 individuals selected 61% (91/150) were male and 49% (59/150) were female, with fashion 32 years old. In preliminary figures from measurement of transaminases was not observed alteration in the profile. Until now has possible to genotype samples 8, and the identified genotype A1 (1/8) D1 (1.8) D2 (3/8), D3 (3/8).

Conclusions: Currently various related research hepatitis occult B are featured in the scientific community, this is evidenced by considerable and continuous number of studies published in indexed journals covering different areas of interest, preliminary data presented here collaborate in the elucidation of this serological profile, suggesting that the presence hepatitis B is occult relatively common on this standard, but the completion of the proposed objectives is necessary for better understanding of this clinical entity and its implication of occult infection development.