

Occult hepatitis B demonstrated by anti-HBc and HBV DNA in HIV-positive patients

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Abstract

Background:

In patients who are hepatitis B virus (HBV) DNA-positive, but HBV surface antigen (HBsAg) -negative, the infection is referred to as occult hepatitis B infection (OBI). Occult HBV infection is harmful when other liver diseases are present, and can aggravate liver damage in in patients with chronic liver diseases. In human immunodeficiency virus (HIV) infection the suppression of viral replication by the immune system might be inactivated, and classical HBV infection in OBI patients may occur.

Health care professionals should be aware of OBI in HIV patients. The routine test for HBV infection in Iran is the enzyme-linked immunosorbent assay for the HBV surface antigen (ELISA HBsAg); therefore, the aim of this study was to evaluate the prevalence of OBI in Iranian HIV patients.

Methods:

This cross-sectional study was conducted in 2012 on sera from all the known and accessible HIV patients in Jahrom and Fassa, two cities in southern Iran. All samples were tested for the HBsAg, HBV core antibody (HBcAb). All the results were analyzed using SPSS.

Results:

Of the 91 patients, seven (7.7%) were HBsAg-positive and forty-five (49.5%) were HBcAb-positive. In patients with negative HBsAg (84 patients), 39 (46.4%) were HBcAb positive and 53 (63%) were positive for HBV DNA.

Conclusion:

The prevalence of HBV infection is relatively high in HIV patients, and more accurate tests than those presently in use should be used for diagnosis.

Key Words: Hepatitis B, HIV infection, Occult hepatitis