

## **Presence of anti-HBc is associated to high rates of HBV resolved infection and low threshold for Occult HBV Infection in HIV patients with negative HBsAg in Chile.**

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### **Abstract**

HBV-HIV coinfection is prevalent. Frequently, anti-HBc is the only serological marker of HBV, which can be indicative of HBV resolved infection, when found together with anti-HBs reactivity; or present as "isolated anti-HBc," related to HBV occult infection with presence of detectable DNA HBV, more prevalent in HIV-positive individuals. Regional data about this condition are scarce. Anti-HBc rapid test has been used as screening, but its performance has not been described in HIV-positive patients. The aim of this study was determine prevalence of anti-HBc in HIV-positive patients, serological pattern of HBV resolved infection and isolated anti-HBc, evaluating presence of HBV occult infection. Assess anti-HBc rapid test compared to ECLIA. Methods included measurement of anti-HBc and anti-HBs in HIV-positive patients with negative HBsAg. Serum HBV DNA quantification and HBV booster vaccination to "isolated anti-HBc" individuals. Detection of anti-HBc by rapid test and ECLIA. In 192 patients, prevalence of anti-HBc was 42.7% (82/192); associated to male gender, drug use, men-sex-men, positive-VDRL, and longer time HIV diagnosis. 34.4% (66/192) had presence of anti-HBs, mean titers of 637 ui/ml. Isolated anti-HBc in 8.3% (16/192), associated to detectable HIV viral load and no-use of HAART; in them, HBV DNA was undetectable, and 60% responded to HBV vaccination booster. Anti-HBc rapid test showed low sensibility (32.9%) compared to ECLIA. These results show that prevalence of anti-HBc in HIV-positive individuals is high, in most cases accompanied with anti-HBs as HBV resolved infection. Low prevalence of "isolated anti-HBc," with undetectable HBV DNA, and most had anamnestic response to HBV vaccination; suggest low possibility of occult HBV infection. Anti-HBc rapid test cannot be recommended as screening method for anti-HBc.