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## "ANTIHBc(+) ONLY" AS A MARKER OF HEPATITIS B VIRUS INFECTION IN DRUG USERS UNDER SUBSTITUTION TREATMENT IN GREECE

**Background:** "AntiHbc(+) only" as a biomarker of HBV exposure needs proper attention due to the potential risk of HBV reactivation. Our aim was to study the prevalence of antiHBc(+) alone in PWID under OST in Greece and its possible correlations with other patient characteristics.

**Methods:** A retrospective analysis of OKANA data collected on May 2021 from individuals with available results for HBsAg, AntiHBs, AntiHBc, AntiHCV and AntiHIV was conducted. In total 5,431 patients[85.7% men, mean age 48.5±9.1 years and 14.3% women mean age 47.6±9.3 years, 71% buprenorphine, 67.9% AntiHCV(+) and 5.3% antiHIV(+)] were analyzed, representing 68.7% of the 7,903 OST patients in Greece on May 2021.

**Results:** HBsAg(+) was detected in 2.8% while 32.3% were naturally immune [HBsAg(-)/antiHBc(+)/antiHBs(+)]. History of vaccination was confirmed in 22.2% but 44.8% were still susceptible. Previous HBV exposure [HBsAg(+)/antiHBc(+)/antiHBs(+)] was evident in 1754/5431 (32.3%) in total.

"AntiHBc(+) only" was recorded in 608 individuals(11.2%), with the lowest rate found in antiHCV(-) [3.6% vs 14.8% for antiHCV(+) (p < 0.0001)] and the highest in antiHIV(+) [25.2% vs 10.4% in antiHIV(-), (p < 0.0001)] individuals.

The ratio of AntiHBc(+) alone among those with evidence of HBV exposure was 34.7% (608/1754) and was increasing with antHCV(+) (35.8% vs 27.1%, p=0.01), antiHIV(+) (42.4% vs 33.8%, p=0.024) and at Athens OST units (37,1 vs 30,2% for rest Greece, p=0.01). After regression analysis only antiHCV(+) (OR 1.44, 95% CI:1.05-1.97, p=0.022) and Athens location (OR 1.34, 95%CI: 1.08-1.65, p=0.008) remained significant for increased AntiHBc(+) ratio.

**Conclusions:** A significant proportion of PWID at OST programs in Greece present antiHBc(+) as the only HBV marker. HCV infection significantly increases this likelihood. It is crucial to identify "antiHBc(+) only" drug users with CHC before DAAs initiation, in order to monitor for ALT flares during treatment and prevent any HBV reactivation.