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Abstract (oral session)

Multicentre study of prevalence of hepatitis B virus infection among persons born in the era of nationwide HBV vaccination: implication for booster vaccination for persons at risk for HIV transmission

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Objectives Whether vaccination for hepatitis B virus (HBV) infection at birth can confer long-term protection against HBV infection is rarely investigated among persons who are at risk for HIV infection in the adulthood in Taiwan where background prevalence of chronic HBV infection was estimated 15% to 20% among the adults. Universal HBV vaccination at birth has significantly reduce the prevalence of chronic HBV infection in those persons born after 1986, among whom it is estimated that more than 99% were vaccinated. **Methods** Data on serologic markers of HBV (hepatitis B surface antigen [HBsAg], antibody for HBsAg [anti-HBs antibody], and antibody for HBV core antigen [anti-HBc antibody]) were collected from HIV-positive and HIV-negative men who have sex with men (MSM) and HIV-negative heterosexuals at 5 major hospitals for HIV care and anonymous HIV testing around Taiwan. All subjects were born after 1986. **Results:** A total of 227 HIV-positive MSM, 394 HIV-negative MSM, and 223 HIV-negative heterosexuals born after 1986 (mean age at enrollment, 23 years) were included for analysis. Mean CD4 count was 364 cells/ μ L and plasma viral load 4.48 log₁₀ copies/ml for HIV-positive MSM. HIV-positive MSM were more likely to have elevated rapid plasma reagin (RPR) titers than HIV-negative MSM and heterosexuals (14.4% vs. 3% vs. 0.4%, respectively; $P < 0.05$). Although the proportions of seropositivity for HBV core antigen that is suggestive of exposure and infection with HBV did not differ among HIV-positive MSM, HIV-negative MSM, and heterosexuals (18.1%, 18.8%, and 17.5%, respectively), HIV-positive MSM had a statistically significantly higher prevalence of HBsAg (6.1%) than HIV-negative MSM and heterosexuals (2.3% and 3.1%, respectively). **Conclusions** Our findings suggest that HIV infection may impair clearance of HBV once infected with HBV and routine serologic testing and HBV booster vaccination should be provided to persons at risk for HIV transmission, especially MSM, who are born in the era of nationwide HBV vaccination and tested negative for anti-HBs antibody in Taiwan.