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LETTER TO THE EDITOR

The prevalence of occult HBV infection in immunized children with HBs Ag positive parents: a hospital based analysis

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We read with avid interest the article by Zhuge et al., where they studied the prevalence and risk factors of occult HBV infection in immunized children born to HBsAg-positive parents. As per the definition mentioned in the study, occult HBV infection is defined as presence of HBV DNA in liver (either with or without detectable HBV DNA in serum) of people who test negative for hepatitis B surface antigen (HBsAg). The authors have not examined liver samples for HBV DNA in the patients who satisfied inclusion criteria and were negative for HBV DNA in serum, which might have resulted in lower prevalence than stated. The authors showed that anti-HBs antibody level is one of the independent risk factors for HBV DNA-positive children by multivariate regression analysis. We felt, although the author observed this, it may just be an association. As per the study by Zuckerman et al. [1], anti-HBs titers more than 10 mIU/ml, anytime after vaccination is protective against HBV infection. In the study done by Su et al. [2], they have concluded that absent Anti-HBs antibody, or low Anti-HBs antibody titers are risk factors for occult HBV. Also, Su et al., mentioned about the high viral load in mother as a major risk factor in occult HBV infection, which was not commented in your study. OBI may be categorized as "seropositive OBI (anti-HBc and/or anti-HBs-positive)" and "seronegative OBI (anti-HBc and anti-HBs-negative)" [3]. Therefore any individual cured of acute or chronic HBV infection would become seropositive OBI. It needs to be investigated whether individuals with seronegative OBI have a risk of reactivation of HBV replication when receiving cancer chemotherapy or other immunosuppressive therapies as well as those with seropositive OBI, and it might depend on the presence or absence of liver disease whether individuals with OBI need to be regularly followed or not. The approach for patients with resolved HBV infection is different in each case; acute HBV infection, chronic infection, and unknown infection. Pertaining to the issues of chronicity of hepatitis B virus (HBV) infection, we already know cases with history of HBV perinatal transmission, in particular mother-to-child transmission plays major role in maintaining chronicity of HBV infection in the children and HBV infection in the adulthood plays very minimal role in maintaining chronicity in cases; therefore, the management of HBV-infected mother to infants needs special attention. Further, information regarding liver function tests, HBV DNA levels and treatment details of the 46 children with HBs Ag negativity and HBV DNA positivity, would have thrown some light over the management of OBI patients.

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