

Persistence of anti-HBs antibody in children whom vaccinated during infantile period and need to booster needs more discussion

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Sir,

The published article by Aypak et al. [1] focused on the persistence of anti-HBs antibody (Ab) in 2- to 12-year-old children in Turkey and the high titer of anti-HBs antibody in 94 (52.8 %) of whom were anti-HBs antibody negative after boosting HBV vaccination [1]. There is a recent report by Tosun et al. from Turkey [4] that they found protective level of antibody near 50 % in children after 9 years of neonatal vaccination. The reported rate of persistent protective level of anti-HBs Ab titers varied from 33 up to 79 %, at least 5 years after vaccination [5]. It seems that the differences are related to the possibility of enrollment of some children without complete vaccination or related to maintaining cold chain in transportation and handling of vaccine, improper injection, and other technical problems [3]. Following a complete series of vaccination during neonatal period, protective antibody level raises in more than 95 % of infants up to 18 months after vaccination, but we do not have enough data to confirm the response or non-response to HBV vaccine in the enrolled study group in the study of Aypak et al. that the main cause is related to retrospective pattern of the study. There is a possibility of previous HBV infection that might potentially be responsible for non-responsiveness to HBV vaccine. In the study of Aypak et al., there is around 50 % missing outcome in who were anti-HBs antibody negative. However, I would like to emphasize that in changing the epidemiology of HBV transmission from vertical to horizontal during adolescence, we should consider the

testing of anti-HBs Ab during this period to make sure the persistence of long-lasting immunity extending to adulthood. Finally, I would like to add that celiac disease may be associated with non-response to HBV vaccine and evaluation of non-responder is recommended [2].

Conflict of interest I declare that there is no conflict of interest, funding, or financial support.

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Probability of previous HBV infection that might potentially be responsible for non-responsiveness to HBV vaccine. Further, host genetic and epigenetic factors are other possible causes

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