Correspondence

Antibody response to hepatitis B vaccination in isolated anti-HBc positive subjects

Sir,

I read with interest the article by Sugunan *et al*¹ on impact of hepatitis B immunization among the Nicobarese tribe. The authors investigated protective antibody response after hepatitis B vaccination in their study. I feel that several points in this study need to be clarified.

Hepatitis B infection has been reported to be hyperendemic in Nicobarese where this study was conducted. As per the inclusion criteria, subjects negative for both HBsAg and Anti-HBs were included in the study. However, hepatitis B core antibody (anti-HBc) status of the study population was not mentioned. This condition could be a confounding factor. Because hepatitis B vaccine is not recommended for isolated anti-HBc positive subjects (HBsAg and anti-HBs negative) living in highy endemic areas due to the high probability of previous exposure to hepatitis B infection². Isolated anti-HBc positivity might be present in these subjects who were at high risk for prior exposure to hepatitis B infection. Antibody response after hepatitis B vaccination may be different in isolated anti-Hbc positive subjects from that of naive subjects³. In addition, primary anti-HBs response develops when anti-HBc was positive at a low titre; whereas secondary or anamnestic antibody response develops when anti-HBc was positive at a high titre^{3,4}. Subjects enrolled in this study might be heterogeneous in terms of anti-Hbc status due to sampling error. Further in this study¹, protective antibody level was tested one month after each vaccine dose and after the completion of vaccine series at second, third and fifth year. As understood from the Figure, protective antibody level after the third vaccine dose was tested at sixth month rather than the seventh month. However, as mentioned in the article, protective levels should have been checked one month after each vaccine dose (after the third dose of vaccine at seventh month not at sixth month). I think there is a typographical error in the Figure.

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References

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