DEAR EDITOR,

I read with interest the recently published article entitled “Low response to intradermal hepatitis B vaccination in incident hemodialysis patients”, by Medeiros et al. in your journal. Despite preventive control measures for hepatitis B virus (HBV) infection and decline in incidence of HBV infection, hemodialysis (HD) patients seem to be at considerable risk of acquiring this infection. Due to lower response to HBV vaccine in hemodialysis patients, there are some recommendations such as using different inoculations routes, adding some adjuvants, and increasing the number of HBV vaccine injection to increase anti-HBV response in HD patients. The rate of sero-protection after HBV vaccination in hemodialysis patients is highly variable and generally lower than that of the general population.

In this study, intradermal (ID) and intramuscular (IM) groups received inoculations at equal time intervals, while in most studies that have shown the priority of ID route over IM route, HD patients had received more number of vaccine injections. Failure to maintain sero-response after vaccination in HD patients has been also attributed to inherited and acquired factors such as sex, age, uremic state, nutritional status, route of administration, and relative immunodeficiency diseases which characterized impaired response to several other vaccines. Another important factor is age. Fabrizi et al. – in a meta-analysis on 8 trials that had assessed the HB vaccine response rate according to the age, with cutoff point of 40 years old – found that dialysis subjects who were over 40 years old have 0.7 of probability of subjects younger than 40 years to develop sero-protection after hepatitis B vaccination. There are several reports of trials that compared effect of using different routes of vaccination on hepatitis B vaccine sero-protection in dialysis subjects with renal failure. The cost and side effects of vaccination should be considered in our conclusion. The authors finished the study after interim evaluation that the antibody titers were not protective in ID group. I think they had another choice and it was crossing the two groups. It also should be mentioned that the correct unit of vaccine dose is microgram, not milligram; it seems it was a typing mistake. Finally, I would like to mention that the correct unit of vaccine dose is microgram, not milligram; it seems it was a typing mistake. Finally, I would like to mention that it is very soon to conclude that vaccine administration is less effective by IM route than ID route. Nevertheless, lower doses of ID vaccine have been effectively used in healthy subjects. Additionally, it should not be overlooked that adequate immune responses were induced by higher doses of ID vaccine, or with more frequent vaccine injections.
REFERENCES


