



Poster Session

P045 - A randomized controlled trial of two schedules of hepatitis B vaccination in predialysed chronic renal failure patients

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Background: Patients with chronic renal disease should be vaccinated as soon as dialysis is forestalled, and this could improve the seroconversion of hepatitis B vaccination.

Objectives: In this study, we aimed to compare seroconversion and immune response rates using 4 doses of 40 µg and 3 doses of 20 µg Euvax B recombinant Hepatitis B surface Antigen (HBs Ag) vaccine administered to predialysis patients with chronic kidney disease (CKD).

Patients and methods: In an open, randomized clinical trial, we compared seroconversion rates in 51 predialysis patients with mild and moderate chronic renal failure who received either 4 doses of 40 µg or 3 doses of 20 µg of Euvax B recombinant hepatitis B vaccine administered at 0, 1, 2, 6 and 0, 1, 6 months, respectively.

Results: Differences in seroconversion rates after 4 doses of 40 µg (80.88%) compared to 3 doses of 20 µg (92%) were not significant ($P = 0.4124$). The mean HBs antibody level after 4 doses of 40 µg at 0, 1, 2, and 6 months (182.2 ± 286.7) was significantly higher than that after 3 doses of 40 µg at 0, 1, and 6 months (96.9 ± 192.1) ($P = 0.004$). Seroconversion after 4 doses of 40 µg (80.8%) was also significantly higher than that after 3 doses of 40 µg (77%) ($P = 0.004$). Multivariable analysis showed that none of the variables contributed to seroconversion.

Conclusions: We found that the 4-dose 40 µg HBV vaccine did not lead to significantly greater seroconversion than 3 doses of 20 µg. Thus, it is perhaps not necessary to introduce a 4-dose 40 µg HBV vaccination schedule to replace the 3-dose 20 µg schedule for predialysis vaccination of patients with stage 3 and 4 CKD. However, further studies with a larger sample size are required.

Keywords: Hepatitis B, Vaccination, Chronic Renal Failure

Data citation:

- Abstract title, see above
- Abstract no., see above
- Authors' names, see above
- Source: Abstract-CD 15th International Symposium on Viral Hepatitis and Liver Disease 2015
- urn:nbn:de:101:1-201506023069