

**PROTECTION AGAINST HEPATITIS B VIRUS INFECTION IN
VACCINATED SRI LANKAN MILITARY SERVICE MEN
FOLLOWING A SINGLE COURSE OF VACCINATION**

H.M. SAGARA KARUNARATHNA

Postgraduate Institute of Science, University of Peradeniya, Peradeniya, Sri Lanka
Department of Microbiology, Faculty of Medicine, University of Peradeniya, Peradeniya, Sri Lanka

Vaccination is the prophylactic measure to protect against the hepatitis B virus (HBV) infection. HBV vaccination is able to stimulate a long term immune response in healthy individuals. The aim of this study was to determine the anti-HBs levels to assess the protective immunity to HBV vaccination among vaccinated Sri Lankan military service men following a single course of vaccination. After three months of completion of the hepatitis B vaccination, blood samples were collected and the sera were tested for anti-HBs levels using a commercial ELISA.

Of the 150 tested military service men, 11 (7.33%) participants acquired anti-HBs levels less than 10mIU/mL (poor responders). The rest of the tested (n=139), participants acquired anti-HBs levels greater than 10mIU/mL. Of the 139 responders to a single course of vaccination, 36 (24%) had anti-HBs levels between 10-100mIU/mL (hypo responders) and 103 (68.67%) had anti-HBs levels greater than 100mIU/mL (high responders).

In conclusion, 7.33% (11/150) of the vaccinated military men did not have adequate levels of anti-HBs. Hence, such military service men need to go for a repeat vaccination and then test for anti-HBs levels. Completing the HBV vaccination and checking the military service men for anti-HBs levels prior to departure from the country for Foreign Service, would be useful to re-vaccinate poor responders to a single course of vaccination.