Abstract

HB vaccines became available in the early 1980s. They are highly immunogenic and efficacious. Currently no vaccinee has become a carrier 5 to 10 years after primary immunization; thus many investigators consider boosters to be unnecessary at 10 years of age. In 2000, the European Consensus Group on Hepatitis B Immunity issued a statement recommending against the use of boosters of HB vaccine in immunocompetent individuals 15 years after primary immunization. However, the real duration of protection conferred by HBV vaccine remained unknown.

In this project, we are going to test the seropositivity and immune memory of HBV vaccine in aldolescents aged 15-18 years. A booster vaccination will be given to part of them and the incidence of acute HBV infection will be monitored for at least 3 years.

Up to now, we have recruited more than 5,000 aldolescents for HBV seromakers testing. The results of 2,563 subjects were already available. Positive of HBsAg was noted in 49 (1.9%) individuals. We are now proceding on the shedualed steps. We will check the cellular immunities for these individuals and give booster vaccinations to part of the individuals and follow up for 3 years.

When the study is complete, we will be able to understand the magnitude of immunity conferred by the HBV vaccine 15 -18 years after the primary vaccination. Basis for deciding the necessity and proper timing for HBV booster vaccination will be provided.

Keywords: hepatitis B; cellular immunity; booster