

# B型肝炎感染增加慢性腎臟病的風險: 台灣全國性的世代研究

## Hepatitis B Virus Infection Increases Risk of Chronic Kidney Disease: A Nationwide Cohort Study in Taiwan

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**Background:** Hepatitis B virus (HBV) infection and chronic kidney disease (CKD) are significant diseases in Taiwan and worldwide. However, the association between HBV and CKD risk remains inconclusive.

**Material and methods:** The present study examined this association by analysis of data from the Taiwan National Health Insurance Research Database and use of ICD-9 codes to identify diseases. We identified 11130 adults with newly diagnosed HBV in 1999-2007 and also randomly selected 44520 matched controls without HBV in the same dataset. Incidence rate and risk of incident CKD were evaluated until the end of 2010.

**Results:** The incidence of CKD was significantly higher in the HBV cohort than the non-HBV cohort (1.90 vs. 1.27 per 1000 person-years,  $p < 0.001$ ), and the adjusted hazard ratio (HR) was 1.32 (95% confidence interval (CI), 1.04-1.68,  $p = 0.001$ ). In multivariate analyses of the influence of HBV on CKD risk with regard to age, sex, and follow-up duration, the risk for CKD in HBV-infected subjects is highest in subjects younger than 50 years (2.25; 1.40-3.63;  $p = 0.001$ ), followed by men overall (1.79; 1.35-2.38;  $p < 0.001$ ), subjects followed for less than 5 years (1.52; 1.17-1.96;  $p = 0.002$ ), and men younger than 50 years (1.46; 1.10-1.95;  $p = 0.009$ ).

**Conclusion:** This large cohort study indicates that HBV infection is associated with an increased risk for CKD. The high-risk HBV-infected subjects should be aggressively monitored for development of CKD.