

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

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

**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 9430 adults with newly diagnosed HCV in 1999-2006 and randomly selected 37720 matched non-HCV controls. Incidence rate and risk of incident CKD were evaluated until the end of 2010.

**Results:** The incidence of CKD was 1.66-fold higher in the HCV cohort than the non-HCV cohort (5.46 vs. 3.43 per 1000 person-years), and the adjusted hazard ratio was 1.28 (95% confidence interval, 1.12-1.46;  $p < 0.001$ ). In multivariate analyses of the influence of HCV on CKD risk with regard to age, sex, follow-up duration, and comorbidities, the risk for CKD in HCV-infected subjects is highest in subjects with diabetes, hyperlipidemia, and cirrhosis (8.44; 3.70-19.23;  $p < 0.001$ ), followed by men younger than 50 years (2.32; 1.49-3.61;  $p < 0.001$ ), subjects younger than 50 years (1.90; 1.33-2.73;  $p < 0.001$ ), men overall (1.44; 1.22-1.71;  $p < 0.001$ ), and subjects followed for 6 or more years (1.35; 1.06-1.71;  $p = 0.014$ ).

**Conclusion:** We conclude that HCV infection is associated with an increased risk of CKD, and the high-risk HCV-infected subjects should be aggressively monitored for development of CKD.