

中文題目：慢性 C 型肝炎高盛行區肝臟纖維化與慢性腎病變相關性大型社區型研究

英文題目：Association of liver fibrosis with chronic kidney disease in chronic hepatitis C patients in the hyperendemic area in Taiwan

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Background: Chronic hepatitis C virus (HCV) infection is a risk factor for chronic kidney disease (CKD). This study aims to investigate whether the severity of liver fibrosis in chronic hepatitis C is associated with the extent of chronic kidney disease.

Method: A community surveillance of viral hepatitis in a HCV hyperendemic village in southern Taiwan from 2019 to 2021. Transient elastography (Fibroscan®) was performed for HCV viremic patients before they were linked to antiviral therapy. Basic demography and potential risk factors for CKD were also acquired. eGFR is calculated by the formula of CKD-EPI. Chronic kidney disease was defined with patients who had decreased eGFR (<60 mL/min/1.73 m²). Patients with hepatitis B dual infection were excluded. Advanced fibrosis was defined as Fibroscan > 9.5 kPa.

Multiple linear regression and logistic regression analysis were used to disclose the correlation and association between liver fibrosis and CKD.

Results: A total of 236 HCV viremic patients were recruited in this study. Of them, 42 patients have CKD (17.79%). Table 1 shows the characteristics of the HCV patients with or without CKD. Patients in the CKD group were older and had a larger proportion of diabetes (DM) and hypertension (HTN). Fibrosis surrogates including FIB4, APRI, and fibroscan data did not differ significantly between two groups. The proportion of patients with advanced fibrosis also did not differ between non-CKD group (36/158, 22.8%) and CKD group (9/29, 31%) separately (P=0.339). In the Table 2, factors correlated to renal function included old age, male gender, DM, and high uric acid. In the Table 3, a similar result was noted by using logistic regression. Liver fibrosis was not the factor that correlated to eGFR or associated with CKD.

Conclusion: The severity of liver fibrosis was not associated with CKD in the cross-sectional study.

A longitudinal study is warranted to find if there is an interplay between liver fibrosis progression and CKD in CHC patients.