慢性腎臟病病人血脂異常與腎功能下降速度及進展至腎臟替代療法的相關性 Association of dyslipidemia with rapid renal progression and progression to RRT in chronic kidney disease

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Background: Dyslipidemia is highly prevalent in patients with chronic kidney disease (CKD) and the relationship between dyslipidemia with renal outcomes in patients with moderate to advanced CKD remains controversial. Hence, our objective is to settle whether dyslipidemia is independently associated with rapid renal progression and progression to renal replacement therapy (RRT) in CKD patients. **Methods:** The study analyzed the association between lipid profile, RRT, and rapid renal progression (estimated glomerular filtration rate [eGFR] slope < -6 ml/min/1.73 m²/yr) in 3303 patients with stage 3 to 5 CKD.

Results: During a median 2.8-year follow-up, there were 1080 (32.3%) participants commenced RRT and 841 (25.5%) had rapid renal progression. In the adjusted models, the lowest quintile (hazard ratios [HR], 1.23; 95% confidence interval [CI], 1.01 to 1.49) and the highest two quintiles of total cholesterol (HR, 1.25; 95% CI, 1.02 to 1.52 and HR, 1.35; 95% CI, 1.11 to 1.65; respectively) increased risks for RRT (*vs.* quintile 2). Besides, the highest quintile of total cholesterol was independently associated with rapid renal progression (odds ratio, 1.36; 95% CI, 1.01 to 1.83).

Conclusions: Our study demonstrated that certain level of dyslipidemia was independently associated with RRT and rapid renal progression in CKD stage 3-5. Assessment of lipid profile may help identify high risk groups with adverse renal outcomes.

Key words: total cholesterol, chronic kidney disease, renal replacement therapy, rapid renal progression

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