

KNOW-CKD 코호트 연구에서 건강관련 삶의 질

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Health Related Quality of Life in KNOW-CKD: Association between Malnutrition, Inflammation, Atherosclerosis, Lifestyle and HRQOL

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Background: Health-related quality of life (HRQOL) can be defined as one's physical, social, or emotional well-being is affected by a medical condition, socioeconomic status and other factors. HRQOL is diminished in patients with end-stage renal disease patients compared with health individuals, and low HRQOL is associated with a greater inflammatory status, poor nutrition, increased hospitalization and high mortality. However, much less is known about the association of HRQOL on patients with predialysis chronic kidney disease (CKD).

Methods: 1,529 CKD patients were enrolled in the prospective KoreaN Cohort Study for Outcome in Patients With Chronic Kidney Disease (KNOW-CKD) study between 2011-2013. We analyzed 1,416 participants from this cohort who underwent baseline examination and HRQOL measure. HRQOL was measured using the Short Form-36 (SF-36, Korean edition), which included physical component score (PCS) and mental component score (MCS). We used multivariate linear regression to analyze the association between malnutrition, inflammation, atherosclerosis, lifestyle and HRQOL.

Results: Estimate glomerular filtration rate (eGFR) and albumin creatinine ration (ACR) was not associated with HRQOL after adjustment for comorbid condition, socio-economic states, hemoglobin, PTH, hsCRP, albumin, 24 urine creatinine, dietary protein intake, coronary calcium score (CCS), pulse wave velocity (PWV), left ventricular hypertrophy (LVH). Dietary protein intake (betha 0.12, 95%CI 0.04 to 0.18) and hsCRP (betha -0.08, 95%CI -1.82 to -0.16) were associated with PCS, but CCS, PWV and LVH were not associated with PCS. Dietary protein intake (betha 0.11, 95 %CI 0.03 to 0.18) was associated with MCS, but hsCRP, CCS, PWV and LVH were not associated with MCS. Smoking, high salt diet and obesity were paradoxically associated with high HRQOL.

Conclusions: Renal function (eGFR and ACR), atherosclerosis and inflammation are not associated with HRQOL in patients with CKD. Nutrition status is associated with PCS and MCS. Inflammation is associated with PCS, but not MCS. Lifestyle factors show paradox in HRQOL that smoking, high salt diet and obesity are associated with high HRQOL.

Key Words: 만성콩팥질환, 건강관련 삶의 질
CKD, HRQOL