

신장이식 환자에서 25-hydroxyvitamin D 결핍의 임상적인 의미

메리놀병원 신장내과

이 동 렬 · 공 진 민

Clinical Significance of 25-hydroxyvitamin D Deficiency in Kidney Transplant Recipients

Dong Ryeol Lee, Jin Min Kong

Maryknoll General Hospital, Internal Medicine, Division of Nephrology

Background : Vitamin D deficiency is prevalent in chronic kidney disease(CKD) patients. Vitamin D deficiency has also been reported to be associated with insulin resistance, albuminuria and cardiovascular disease, which is the major cause of mortality in CKD patients. The data regarding this association in renal transplant patients is scarce.

Purpose : To investigate the prevalence of 25- OHD deficiency and association with insulin resistance, proteinuria, and various indicators of cardiovascular(CV) disease such as pulse wave velocity(PWV), ankle brachial index (ABI), flow mediated dilation and carotid intima media thickness in renal transplant recipients.

Patient and Method : Cross- sectional analysis of 96 renal transplant patients with mean age of 48 ± 10 and posttransplant months 103 ± 53 . We compared Insulin resistance (HOMA- IR), prevalence of proteinuria(random urine protein/creatinine ≥ 200 mg/mg) and CV parameters between 25- OHD deficient (< 30 ng/mL) and normal vitamin D group.

Results : the prevalence of 25- OHD deficiency and proteinuria was 19.8% (19/96) and 25.3% (24/95), respectively. The prevalence of proteinuria was significantly higher in 25- OHD deficient group compared with normal vitamin D group (47.4% vs. 19.7%, $p=0.019$). Posttransplant month was significantly longer in deficient group (126 ± 49 vs. 97 ± 53 , $p=0.042$). No association of vitamin D level with insulin resistance and various parameters of arterial stiffness, endothelial dysfunction and atherosclerosis was observed in our renal transplant patients.

Conclusion : we conclude that 25- OHD deficiency is not uncommon and is significantly associated with an increased prevalence of proteinuria in renal transplant recipients. No association of vitamin D deficiency with insulin resistance and CV parameters was observed.

Key Words : 비타민 D 결핍, 신장이식, 인슐린 내성, 단백뇨

Vitamin D, Kidney Transplant, Insulin Resistance, Proteinuria