

## 이식 전 25-hydroxy vitamin D 결핍이 이식 후 이식신 기능에 미치는 영향: 3년 관찰연구

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### The Impact of Pretransplant 25-hydroxy Vitamin D Deficiency on Graft Function: A 3-Year Observational Study

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**Background:** In addition to vitamin D's canonical role in musculoskeletal health, several reports have demonstrated that serum vitamin D levels may influence kidney function. This study was undertaken to examine the effect of serum vitamin D levels at the time of kidney transplantation (KT) on graft function.

**Methods:** One hundred thirty-one patients who received KT were enrolled. 25-OHD levels were obtained during hospitalization prior to transplantation. We measured estimated glomerular filtration rates by the MDRD formula (eGFR) at baseline and every 6 months after KT up to 36 months.

**Results:** 38.1% of the patients were diagnosed with 25-OHD deficiency defined as less than 10 ng/mL. Recipient sex, serum albumin level, and predominant renal replacement therapy modality before KT were found to be independent pretransplant risk factors for 25-OHD deficiency. Subsequent mixed-model repeated measure analysis of covariance for between-subjects effects revealed that group according to 25-OHD levels has the only significant main effect on eGFR at each 6-month interval after KT during the 36-month follow-up period [F (1, 111)=10.52, P=0.002].

**Conclusion:** The 25-OHD deficiency was significantly associated with post-transplant lower eGFR. This suggests that 25-OHD may play an important role in maintaining graft function after KT.

**Key Words:** 이식 신기능, 신장이식, 비타민 D

Kidney graft function, Kidney transplantation, Vitamin D