

## 만성신장병의 초기 단계에서 소변 유리 경쇄 분석 결과의 의미

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### Urine Free Light Chains as Markers of Early Stages of Chronic Kidney Disease

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**Introduction:** In patients with chronic kidney disease (CKD), the renal excretion of free light chains (FLC) is frequently elevated. The aim of this study was to investigate the potential of FLCs as new detection markers for early stages of CKD.

**Methods:** We assayed serum and urine FLCs and calculated kappa/lambda ratio from 70 patients with CKD stages I and II. Estimated glomerular filtration rate (eGFR) was calculated using CKD-EPI method.

**Results:** Compared with in control group (n=16), there were no differences in serum kappa and lambda levels, serum kappa/lambda ratio, urine kappa level and urine kappa/lambda ratio in early CKD group. Abnormal elevation of urine lambda level (>10 mg/L) showed in 35% of patient with early CKD. In the binary logistic regression analysis, abnormal elevation of urine lambda level was independent factor associated with early CKD (odd ratio: 4.375, p<0.001).

**Conclusion:** Increased concentration of urine lambda FLC was seen in patients with early CKD. Our results suggest that urine lambda FLC level would be a new marker for the detection of early stages of CKD.

**Key Words:** 만성신장병, 유리경쇄, 표지자

Chronic kidney disease, Free light chain, Marker