

## 좌심실 비대와 좌심실 수축기 기능부전이 신이식 후 예후에 미치는 영향

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### Left Ventricular Hypertrophy and Left Ventricular Systolic Dysfunction Affect Long-term Outcome in Recipients of Kidney Transplantation

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**Background:** Left ventricular hypertrophy (LVH) and left ventricular systolic dysfunction (LVSD) are independent risk factors for cardiac death in both the general population and patients with end-stage renal disease. However, only limited data on echocardiographic prognostic parameters in recipients of kidney transplantation (KT) are available.

**Methods:** This study was a retrospective review of patients assessed for KT from Jan. 1997 to Jan. 2012. The LVSD was defined by ejection fraction below 50%. The primary and secondary end points were all-cause mortality and graft failure, respectively.

**Results:** Of 4,650 patients assessed for transplantation, 1,870 had an echocardiography. A total of 231 (12.4%) patients experienced graft failure and 116 (6.2%) died during a mean follow-up of 4.5 years. The recipients with LVH were associated with all-cause mortality ( $p=0.007$ ) and showed higher occurrence of graft failure (GF) ( $p<0.001$ ). The recipients with LVSD also showed higher all-cause mortality ( $p=0.045$ ) and graft failure ( $p=0.004$ ) by Kaplan-Meier method. In a multivariate analysis, increased age ( $p=0.014$ ), previous history of CV event ( $p=0.015$ ), PTDM ( $p=0.013$ ) and LVSD (hazard ratio: 2.987, 95% confidence interval: 1.061-8.412;  $p=0.038$ ) were associated with all-cause mortality. However, none of LVH and LVSD was significantly associated with GF in a multivariate analysis.

**Conclusion:** In patients of KT candidate, easily determined echocardiographic finding of LVSD before KT was independently associated with all-cause mortality after transplantation.

**Key Words:** 신이식, 좌심실비대, 좌심실 기능부전

Kidney transplantation, LVH, Systolic dysfunction