

## 생체 신이식 환자의 특징과 성적

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### Characteristics and Outcomes of Living Kidney Donors

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**Objectives:** We investigated trend of ECLD and long-term impact of kidney donation on renal function, proteinuria, and hypertension as well as in-hospital mortality, and in-hospital occurrence of end stage renal disease (ESRD).

**Methods:** We retrospectively analyzed medical records of 1,075 living kidney donors at Seoul National University Hospital from 1993 through 2014. ECLD was defined to be one with at least 1 of 5 criteria as followings: age older than 60 years, body mass index >30 kg/m<sup>2</sup>, history of hypertension, estimated glomerular filtration rate (eGFR) <80 mL/min, and proteinuria or microscopic hematuria.

**Results:** The mean age of donors was 41.6±10.9 years, and there were 567 (52.7%) female donors. The serum creatinine at donation was 0.8±0.2 mg/dL. The mean systolic and diastolic blood pressure was 120.3±12.7 and 75.9±9.8 mmHg at donation. A total of 469 (43.6%) donors met the ECLD criteria, and proportion of ECLD has been increasing (10.7% in 1993-1999, 20.7% in 2000-2004, 68.7% in 2005-2014). The proportions of each medical abnormality of ECLD were as followings: old age (4.1%), obesity (3.0%), hypertension (3.4%), low eGFR (63.7%), proteinuria (0.4%), and microscopic hematuria (2.6%). There was no difference in renal graft survival rate between ECLD and standard-criteria living donor groups. No donor was reported to need dialysis or transplantation during follow-up with median duration of 4.96 years. Five donors died at median of 10 years after donation. However, donor follow-up loss rate was 47.2% at 5 years, and 66.5% at 10 years. Renal function (eGFR) decreased during the first 1 year and was stabilized after then. At 3-year follow-up, 44.2% and 3.0% had CKD IIIa and IIIb, respectively. Urine protein-creatinine ratio (UPCR) was higher than 0.3 in 21 (2.0%) and UPCR was not higher than 1.0 in any donor at 3 years after donation. Hypertension was detected in 8.4% of donors at 3 years after donation.

**Conclusions:** Most donors had a preserved renal function without significant proteinuria. Both mortality and progression to ESRD was very rare in carefully-selected kidney donors. However, we should follow up living donors more carefully, because follow-up loss rate was very high and ECLD is increasing.

**Key Words:** 생체신이식, 공여자, 신기능

Living kidney transplantation, Donor, Renal function