

## 생체 신장이식 후 고혈압의 위험요인

서울아산병원 신장내과<sup>1</sup>, 서울아산병원 외과<sup>2</sup>

유훈<sup>1</sup>, 김효상<sup>1</sup>, 백충희<sup>1</sup>, 신은혜<sup>1</sup>, 조형진<sup>1</sup>, 한덕종<sup>2</sup>, 박수길<sup>1</sup>

### Risk Factors of Hypertension after Living Donor Kidney Transplantation

Hoon Yu<sup>1</sup>, Hyosang Kim<sup>1</sup>, Chung Hee Baek<sup>1</sup>, Eunhye Shin<sup>1</sup>, Hyungjin Cho<sup>1</sup>  
Duck Jong Han<sup>2</sup>, Su-Kil Park<sup>1</sup>

Asan Medical Center, Division of Nephrology<sup>1</sup>  
Asan Medical Center, Department of Surgery<sup>2</sup>

**Background:** Hypertension is very common in kidney transplant recipients after transplantation. It is associated with cardiovascular complication and poor graft survival in transplanted patients. The aim of this study is to evaluate possible factors associated with hypertension following kidney transplantation.

**Methods and Materials:** The recipients who underwent living donor kidney transplantation at Asan Medical Center between January 2009 and April 2012 were enrolled. Patients were divided into two groups according to use of anti-hypertensive medication or not at 12 months after transplantation. Two groups of patients were compared in donor factors, recipient factors, characteristics at 12 months after transplantation.

**Results:** Total 524 patients were enrolled. 484 patients (92%) had hypertension before transplantation. 353 patients (67%) had hypertension 12 months after transplantation. On univariate analysis, female donor, hypertensive donor, donated right kidney, male recipient, recipient left ventricular hypertrophy (LVH), number of initial anti-hypertensive medication >2, pre-transplant hypertension, high serum creatinine at 12 months after transplantation, high hemoglobin at 12 months, high body mass index (BMI) at 12 months and use of cyclosporine at 12 months were associated with hypertension. On multivariate analysis, male recipient (OR: 2.38; 95% CI: 1.32-4.29); pre-transplant hypertension (OR:4.82; 95% CI: 1.82-12.73); recipient LVH (OR:1.79; 95% CI: 1.07-2.99); Donor hypertension (OR:4.67; 95% CI: 1.19-18.43); cyclosporine use at 12 months after transplantation (OR: 2.00; 95% CI: 1.18-3.41); BMI>25 kg/m<sup>2</sup> at 12 months after transplantation (OR: 3.63; 95% CI: 1.96-6.73) were associated with hypertension.

**Conclusion:** These data show that male recipient, hypertension before transplantation, recipient LVH, hypertensive donor, obesity, cyclosporine use were independent factors associated with hypertension. It would be useful to predict and prevention the hypertension after kidney transplantation.

**Key Words:** 신장이식, 고혈압, 위험요인

Kidney transplantation, Hypertension, Risk factor