

고령환자에서 신장이식의 임상결과

서울대학교병원 내과¹, 서울대학교 보라매병원², 울산대학교 의과대학 아산병원 외과³
울산대학교 의과대학 아산병원 내과⁴, 분당서울대병원 내과⁵

유경돈¹, 안정남², 김영훈³, 박수길⁴, 채동완⁵, 오윤규², 김연수¹, 임춘수², 이정표²

The Clinical Outcomes of Geriatric Kidney Transplantation in Korea

Kyung Don Yoo¹, Jung Nam An², Young Hoon Kim³, Su Kil Park⁴, Dong-Wan Chae⁵
Yoon Kyu Oh², Yon Su Kim¹, Chun Soo Lim², Jung Pyo Lee²

Seoul National University Hospital¹

Seoul National University Boramae Medical Center Department of Internal Medicine²

Department of Surgery³ Asan Medical Center University of Ulsan College of Medicine Seoul Korea

Internal Medicine⁴ Asan Medical Center University of Ulsan College of Medicine Seoul Korea

Internal Medicine⁵ Bundang Seoul National University Hospital

Background: Elderly individuals who underwent kidney transplantation are growing rapidly. Proportion of kidney transplant recipients older than 65 years increased from 9.5% to 18.4% between 2001 and 2011 according to the U.S. OPTN/SRTR annual report. According the KONOS data, about one-fifth patients of all listed candidates (22.4%) are older than 60 years old waiting for kidney transplantation. However, clinical outcomes in elderly patients were not well evaluated in Korea.

Method: This is a multicenter cohort study included patient underwent kidney transplantation between 1997 and 2011 in 5 major tertiary hospitals in Korea. Patients under 18 years old were excluded. A total of 2614 kidney transplant patients were enrolled. Patient survival, allograft survival, and biopsy-proven acute rejection (BPAR) were monitored as end-points in elderly transplant patients comparing with younger population.

Results: Participants older than 60 years old was 8.5% (N=223). Their mean age was 63.2±2.7 years old. Total patients were divided into 5 groups according to transplant age by 10 years. The male patients (69.5%), the prevalence of diabetes mellitus (39.0%), and history of ischemic heart disease (16.9%) were more in oldest age group (>60YO). Deceased donor transplantation was more frequent (34.1%). The over-all mortality rate was significantly higher in the oldest group (1 yr survival 96.0%, 5 yr survival 93.0%). However, age did not affect allograft survival (1 yr survival 96.8%, 5 yr survival 94.5% in the oldest group) and the prevalence of BPAR conversely decreased as the age increase. In recipients 60 years and older, BPAR was an independent risk factors for allograft loss after adjusting for age, gender, diabetes, hypertension, and donor type (p=0.029, hazard ration 2.86, 95% confidence interval 1.12-7.33).

Conclusion: Kidney transplantation in the elderly is comparable to younger age. Episode of acute rejection could affect allograft survival.

Key Words: 신이식, 고령

Kidney transplantation, Elderly patients