

신장이식 대기 중 사망률에 미치는 요인 분석: 한국 질병관리본부 장기이식관리센터 코호트 연구

서울대학교병원 신장내과¹, 서울특별시 보라매병원²

이선화¹, 유경돈¹, 안정남², 오윤규², 임춘수², 김연수¹, 이정표²

Factors Affecting Mortality during Waiting Time for Kidney Transplantation: A Nationwide Population-based Cohort Study using The Korean Network for Organ Sharing (KONOS) database

Sunhwa Lee¹, Kyung Don Yoo¹, Jung Nam An², Yun Kyu Oh²
Chun Soo Lim², Yon Su Kim¹, Jung Pyo Lee²

Division of Nephrology, Department of Internal Medicine¹, Seoul National University Hospital
Department of Internal Medicine², Seoul National University Boramae Medical Center, Seoul, Korea

Background: Longer waiting times for kidney transplant have been suggested to be more deleterious than shorter waiting times. We analyzed the impact of waiting time on the post-transplant outcome and investigated risk factors for mortality during waiting time based on complete enumeration survey in Korea.

Patients and methods: We analyzed all persons over 18-years-old deceased donor kidney transplant cases enrolled in Korean Network for Organ Sharing (KONOS) data between Jan 2000 to Jan 2015. The primary end point was all cause of death after enrollment.

Results: Of the 24,296 waiting-listed dialysis subjects, 5,255 patients including 588 re-transplant cases received kidney transplantation from deceased donor with median waiting time of 4.5 years. Ten year overall survival was 81.3% in kidney transplant recipients, whereas 68.1% in dialysis patients. Unlike previously known data, the effect of waiting time on mortality after transplantation was insignificant. During waiting time, however, various demographic and clinical factors are associated with increased mortality. Diabetic patients are more likely to die before transplantation (HR 2.25, 95%CI 1.37-3.70, p=0.001). Aging is another significant risk factor for mortality. Only 56% of people aged 65 survive after 10 year of waiting, whereas 86% of people aged 35. Patients who have higher body mass also show increased mortality (p=0.048) before transplantation. However, blood type, gender and re-transplantation were not associated with mortality.

Conclusion: Longer waiting times on dialysis do not affect survival after transplantation although transplant itself shows better overall survival. It should be emphasized to have more attention to the patients who are diabetic, old, and obese with higher risk for mortality during waiting time.

Key Words: 신장이식, 이식 대기 시간, 사망률

Kidney transplantation, Waiting time, Mortality