KSN 2017 Abstract

KSN-17-P158

# Kidney donor risk index is a good prognostic tool for prediction of early post-transplant kidney function and graft survival in Korean population

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**Objectives :** Kidney donor risk index (KDRI) is used in the United States to estimate the deceased donor kidney. However, KDRI is not yet used in Asian population. We tried to validate KDRI in assessment of deceased donor kidney in a large number of Korean population group.

**Methods :** The data of Korean Organ Transplantation Registry (KOTRY) between 2009 to 2012 was used in the analysis. Among 1924 deceased donor kidney transplantation, 1582 cases in which KDRI score could be calculated were included in this study. We investigate the impact of KDRI on the graft function and graft survival.

**Results :** We divided the donors by KDRI tertile (T1: range, 0.6432~1.17025, T2: range, 1.17057~1.48566, T3: range, 1.48630~3.80629). The recipients of T1 were younger and had less diabetes. Mean estimated glomerular filtration rate at post transplant 1 year of each group was 76.1 ±21.0, 64.7 ±20.3, 55.5 ± 21.0 ml/min/1.73m2 respectively. In the Cox regression analysis, KDRI showed good association with death censored graft survival, of which median follow up duration was 24.6 months (hazard ratio 1.778, 95% confidence interval 1.087-2.906, p=0.022).

**Conclusions :** KDRI is a good tool for estimation of early posttransplant outcomes in Korean population.

**Keywords :** KDRI, kidney transplantation