

THE EFFECT OF DIALYSIS DURATION ON MARGINAL DONOR TRANSPLANTATION DECISION IN DIALYSIS PATIENTS

Serhat Korkmaz¹, Alparslan Ersoy², Salih Gulten², Ilker Ercan³ and Nizameddin Koca⁴

1: Internal Medicine, Mardin Devlet Hastanesi, Mardin, Turkey
2: Nephrology, Uludag University, Bursa, Turkey

3: Biostatistics, Uludag University, Bursa, Turkey
4: Internal Medicine, SYEAH, Bursa, Turkey

Objectives:

Organ shortage is one of the most important problems in kidney transplantation (KT). For this reason, the expanded donor criteria have been developed in recent years. In this study, we aimed to compare the factors affecting the decision to accept marginal deceased kidney donation in dialysis patients with short or long dialysis durations.

Methods:

597 dialysis patients, according to the duration of dialysis were divided into two groups (Group 1: <40 months, n=145, Group 2: >40 months, n=452). Patients were asked about the acceptance of marginal associated donor and/or kidney properties with certain diseases or some of the features that differ from normal cadaveric kidneys. Hospital Anxiety and Depression Scale was performed. Patient's donor kidney selectivity score (DKSS) was obtained by asking 32 questions that evaluate their consents for marginal kidney donation.

Results:

Groups characteristics (gender, age, body weight, body mass index, systolic and diastolic blood pressure) were similar ($p>0.05$). While 69.3% of dialysis patients wanted to have KT, 30% of them registered on the waiting list. While 60 patients (10%) did not want to have KT, 299 of them (50.1%) wants to receive from live donors and 238 of them (39.9%) wants to receive from cadaveric donor. Ratios of patients that had live donor was 11.7%. DKSS in Group 1 is 37.8 ± 21.6 and 31.9 ± 3.23 in Group 2 ($p<0.05$). Patients in Group 2 were more selective for marginal donor KT. The acceptance of a donor kidney from close relatives, excessive fat or thin, alcoholic, the opposite sex, mentally ill or made illegal works was significantly higher in Group 1 (Table 1 - 4). Comparison of the groups thoughts about donors diseases and habits. DKSS and selectivity was significantly decreased as the duration of education was increased. No significant relationship was observed between DKSS and total dialysis period and socioeconomic score. In addition, negative relationship was noted between anxiety and depression scores and DKSS ($p<0.05$).

Table-1: Comparison of the groups thoughts about donors diseases and habits

Donor kidney properties	P Value
With hepatitis B	AD
With Hepatitis C	AD
With Hypertension	AD
With Diabetes	AD
With heart disease	AD
With pulmonary disease	AD
With non-methastatic brain cancer	AD
Older than 70 yaers	AD
Younger than 15 years	AD
Younger than 5 years	AD
Died secondary to intoxication	AD
With morbid obesity	<0.05
Extremely weak	<0.05
Olcoholic donor	< .05

Table-2: Comparison of the groups thoughts about donor kidney properties

Donor kidney properties	P Value
With high serum creatinine levels	AD
Highly proteinuric donor	AD
With treatable kidney infection	AD
With mild kidney disease	AD
Died secondary to intoxication	AD
With urological anomaly	AD
Kidney with >48 hours cold ischemia	AD

Table-3: Patients thoughts about receiving blood type and tissue group mismatched cadaveric kidney

Donor kidney properties	P Value
Blood type mismatched kidney	AD
Blood type mismatched kidney with meeting the costs of treatment for yourself	AD
The kidney with low level of tissue group compliance	AD
The kidney with no tissue group compliance	AD

Table-4: Thoughts about receiving cadaveric kidney from the donors with social properties.

Donor kidney properties	P Value
Kidney from dead partner, mother, father or siblings	<0.05
Kidney from dead relatives	<0.05
Kidney from dead close friend	<0.05
Kidney from mentally ill donor	0.05
Kidney from opposite sex	<0.05
Kidney from donor who did illegal work	<0.05
Kidney from other religion	AD
Kidney from atheist	AD

Conclusions:

Increased waiting time negatively effects the decision of receiving kidney from marginal donor.

