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RENAL TRANSPLANTATION. CLINICAL - 2

SP845

CLİNİCAL OUTCOME OF ACUTE REJECTİON EPİSODES IN KIDNEY RECIPIENTS: ANALYSİS OF 12 YEARS OF SİNGLE CENTER EXPERIENCE

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Introduction and Aims: Kidney transplantation is the best treatment of choice for patients with end stage renal disease. Despite improvement in immunosuppressive treatment options, acute rejection of allograft is still the main cause of graft loss. In this study we aimed to show frequency and types of acute rejections with their effects on graft survival.

Methods: Kidney recipients from 2003 to 2015 were investigated for acute rejection diagnosis retrospectively. 390 patients who underwent kidney transplant at our center were searched. Patients who had acute rejection episode (ARE) during follow-up were analyzed according to their demographic features, immunologic state, donor properties, rejection type, treatment modalities and outcomes.

Results: Biopsy-proven 69 acute rejection episode were identified in 64 kidney allograft recipients. Demographic and immunologic features of patients were given in table 1. Of the 64 patient , 7 who had an high risk immunologic state were treated with plasmapheresis and intravenous immunoglobulin (IVIG). A total 39 out of 69 (56.6 %), 23 (33.3 %), 7 (10.1%) rejection were T cell-mediated (TCMR), antibody-mediated (AMR) and mix type respectively. Type of acute rejections according to banff classification were given in table 2. 43 (67.2 %) acute rejection episode were in first 6 months, 21 (32.8%) were after 6 month at posttransplantation period. Noncompliance of treatment in 3 patients resulted with ARE. At the follow-up 5 (7.8%) patients developed second acute rejection episode. Biopsy-proven acute rejection episodes were treated with high-dose methylprednisolone (58 ARE), thymoglobulin (47 ARE), IVIG (14 ARE) plasmapheresis (13 ARE), rituximab (1 ARE), eculizumab (2 ARE) according to histopathologic classification. Graft loss occurred in 11 patients (17.1%). One year graft survival was 94% in patients without AMR and 96% with AMR. Five year graft survival was 84% in patients without AMR and 70% with AMR (logrank= 0.421). Five year graft survival in patients with TCMR was 80% and 79% without TCMR (logrank= 0.787).

Conclusions: Our findings suggest that treatment of patients with TCMR and AMR have distinct effects on long-term graft survival. Long-term graft survival was not influenced patients with TCMR but 5 year graft survival rate was decreased in patients with AMR despite successful treatment.

SP845 Table 1: Demographic and Immunological Features of the Patients

Patient Number (n)	64
Age (mean ± sd)	36 ± 11
Gender (n, Male/Female)	39/25
Living / Deceased Donor (n)	14/50
Mismatch Number (median) (minimum, maximum)	3 (0-6)
PRA Class 1 positivity (n, +/-)	12/50
PRA Class 2 positivity (n, +/-)	11/51
Dialysis vintage (months) (mean ± sd)	48 ± 59
Previous Transplantation (n, +/-)	11/0

SP845 Table 2: Type of Acute Rejections According to Banff Classification

Type	Subtype	Patient Number (n)
Antibody Mediated Rejection	Type (grade) 1	17
Antibody Mediated Rejection	Type (grade) 2	6
Antibody Mediated Rejection	Type (grade) 3	1
Borderline Changes		11
T Cell Mediated Rejection	Type (grade) 1A	10
T Cell Mediated Rejection	Type (grade) 1B	9
T Cell Mediated Rejection	Type (grade) 2A	7
T Cell Mediated Rejection	Type (grade) 2B	2
T Cell Mediated Rejection	Type (grade) 3	0

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