ESOTCongress

THE INTERNATIONAL TRANSPLANT CONGRESS®

ATHENS | 17-20 SEPTEMBER 2023

Transplant International

21st Congress of the European Society for Organ Transplantation

17 September - 20 September 2023. Athens, Greece

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About the European Society for Organ Transplantation

The European Society for Organ Transplantation (ESOT) was founded nearly 40 years ago and has been dedicated to pursuing excellence in organ transplantation ever since.

Facilitating a wealth of international clinical trials and research collaborations over the years, ESOT remains committed to its primary aim of improving patient outcomes in transplantation.

With a community of transplant professionals from around the world, ESOT is an influential international organisation and the facilitator of the biennial ESOT Congress. ESOT attracts the foremost transplantation experts to work in its committees and sections. It has an impressive track record in supporting research, extensive education and promoting changes in European policy.

Our Mission

To improve outcomes for patients with terminal organ disease through transplantation, organ regeneration and substitution.

Our Vision

To promote sustainable scientific advancement through multidisciplinary communities of healthcare professionals

To deliver first-class education, training and career advancement opportunities to all healthcare professionals, with specific training programmes for low-income countries

To work with partner organisations, professional bodies and competent authorities to improve public and institutional awareness of the latest research in the field

To develop and promote policies for equitable access to transplantation and related therapeutic strategies

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P693 DESENSITIZATION IN KIDNEY TRANSPLANT RECIPIENTS WITH PREFORMED DSA AND A NEGATIVE CDC CROSSMATCH DOES NOT IMPROVES REJECTION RATE AND GRAFT SURVIVAL

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Background: A significant proportion of kidney transplants showed a high HLA sensitization and should be considered for transplantation across the HLA barrier. The best strategy to manage these patients is still a matter of debate and the benefits of desensitization based on apheresis techniques and rituximab have not been clearly delineated.
Methods: We review all kidney transplant performed at our center between 2009 and 2021 who showed donor-specific antibodies (DSA) at the time of transplant and a negative CDC crossmatch. All patients received induction therapy with thymoglobulin and maintenance immunosuppression with tacrolimus, MMF and steroids. According to the treating physician criteria patients also received treatment with apheresis (5-7 sessions of plasma-exchange or 5 sessions of immunoadsorption) and one single dose of Rituximab 375 mg/m2. We analyze main outcomes after transplantation in both groups.
Results: During the study period 101 out of 1525 kidney transplants performed at our unit had at least one DSA at the time of transplant. In 64 cases standard treatment was administered while in 37 cases treatment with apheresis and rituximab was added. Main donor and recipient characteristics are shown in table 1. Incidence of acute rejection (37.5% vs. 35%), renal function at 6 months and 5-year patient and death-censored graft survivals were not different between groups (table 1). The main cause of graft failure was chronic antibody mediated rejection in both groups. Infectious complications were not different between groups.
Conclusions: HLA incompatible kidney transplants are associated with a high rate of antibody-mediated rejection. Adding treatment with apheresis and rituximab during the peri-transplant period did not significantly modify main outcomes after transplantation.

N	64	37	
Donor age	55 ± 14	53 ± 16	0.523
Patient age	56 ± 13	47 ± 16	0.005
Dialysis time (months)	76 ± 93	77 ± 101	0.980
HLA A mismatches	1.3 ± 0.7	1.3 ± 0.6	0.889
HLA B mismatches	1.5 ± 0.7	1.4 ± 0.7	0.487
HLA DR mismatches	1.3 ± 0.6	1.2 ± 0.6	0.681
cPRA (%)	95 (65-100)	98 (85-100)	0.130
HLA class (I / II / I+II)	21 / 38 / 5	8 / 26 / 3	0.449
MFI iDSA	4950 ± 4990	6177 ± 6004	0.264
ABMR (n; %)	16 (25%)	7 (19%)	0.246
TCMR (n; %)	8 (12.5%)	6 (16%)	0.645
Serum creatinine 6 months (mg/dL)	1.7 ± 1.0	1.4 ± 0.4	0.125
Proteinuria 6 months (g/g creatinine)	0.62 ± 1.4	0.62 ± 0.68	0.985
5-year patient survival	82%	89%	0.153
5-year death-censored survival	61%	67%	0.147

P694 LONGITUDINAL ANALYSIS OF ANTIBODIES IMMUNE RESPONSES IN KIDNEY TRANSPLANT RECIPIENTS AFTER SEVERE ACUTE RESPIRATORY SYNDROME CORONAVIRUS 2

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Background: Evaluating the immune response of Kidney transplant recipients (KTRs) who recover from severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection and the factors that may influence it, namely the role of immunosuppression, is crucial to understand the quality and durability of the immune response to natural infection. In this study we report the longitudinal antibody kinetics using two SARS-CoV-2 antigens, namely the nucleocapsid and the S1 domain of spike protein, anti-N and anti-S1 IgG ratio values, respectively.
Methods: All adult KTRs with primary infection SARS-CoV-2, in the absence of vaccination from March 2020 and March 2021, were included in this study. Patient demographic and clinical characteristics were retrospectively retrieved from the electronic medical records. Blood samples were collected according to schedule visits to hospital with the last sample for antibody testing collected on July, 2021.
Results: Seventy-seven KTRs with SARS-CoV-2 infection were analyzed. Mean (SD) age of KTRs was 57.1 (11.6) years, and 49 (63.6%) were male. Among the 77 KTRs, 52 (67.5%) were seropositive for anti-N and 64 (83.1%) were seropositive for anti-S1. Posterior mean estimates of anti-N values reached their peak by day 42 after infection with a maximum value of 3.92 (95% credibility interval (CrI), 3.10-4.99) followed by a decay with time, reaching the threshold of positivity of 1.4 (95% CrI, 0.64-2.31) by day 176. In these patients, severe disease, male sex, tacrolimus trough levels and dichotomized mycophenolate dose were significantly associated with changes in posterior mean values over time. Regarding anti-S1 values, posterior mean estimates peaked later, by day 56 after infection with a maximum value of 5.29 (95% CrI, 3.79-7.17), and then remained relatively stable over time, with minimal decline over the 7-month follow-up period. In these patients, disease severity was the only factor significantly associated with changes in posterior mean values over time.
Conclusions: This is the largest known longitudinal study describing the variability of memory of the immunosuppressive response of KTRs in a state of primary infection in the absence of vaccination.