Abstract# D2485

Pre-Transplant Angiotensin II Type 1 Receptor Antibodies: A Risk Factor for Decreased Kidney Graft Function at 12 Months Posttransplant?


Angiotensin II type 1 receptor antibodies (AT1Rab) are associated to a significantly lower graft survival and a higher risk of AMR after kidney transplantation. This study aimed to evaluate graft function and BPAR during the 1st yr posttransplant (PT) in 114 adults kidney transplant recipients (KTR) between 03/09 to 08/12 (all from LD). Pre-KT sera were screened for AT1Rab (ELISA, CellTrend GmbH, Luckenwalde, Germany) and HLA-DSA (Labscreen, SAB cl & cII, One Lambda). AT1Rab was considered positive ≥ 17 IU. 3 groups were analyzed: AT1Rab only; HLA-DSA only; and w/o AT1Rab and HLA-DSA. Multivariate linear regression analysis to 1st yr eGFR were done including all the variables with a p value <0.1 from the univariate analysis. Results are depicted in the Table. No differences were observed in donor’s (D) eGFR, D/R gender/age, R BMI, KT number, HAP-matches, ischemia times across the groups nor tacrolimus trough levels, ACE inhibitor/AT1R blocker use or HTN during the 1st yr. Multivariate analysis showed 4 factors independently and significantly associated with eGFR at 12mo PT: BPAR (-18.7 -28.2 to -9.26 p<0.001), AT1Rab (-10.51 -20.9 to -0.095 p=0.048), D age (-0.42 -0.75 to -0.103 p=0.010), and R age (-0.36 -0.67 to -0.048 p= 0.024). Conclusions. In this study AT1Rab in pre-KT sera was an independent and significant risk factor for decreased eGFR at 12 mo PT. This finding deserves to be confirmed in a larger KTR population.