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PLB085: ACUTE KIDNEY DYSFUNCTION WITH NO REJECTION (ADNR) » IS ASSOCIATED WITH POOR OUTCOMES IN KIDNEY TRANSPLANT RECIPIENTS

François Paquot[1], Hans Pottef, Catherine Bonvoisin[3], Laurent Weekers[3], Francois Jouret[3]
[1]Chu, Université De Liège, Belgium; [2]Kul Kortrijk, Belgium; [3]Chu, Université De Liège, Belgium

The entity "acute kidney dysfunction with no rejection (ADNR)" has been proposed for kidney transplant recipients (KTR) presenting with acute elevation of serum creatinine without histological evidence of acute rejection (AR). The prognosis of ADNR is unknown. From 2007 to 2015, we retrospectively categorized all KTR with for-cause kidney biopsy within 12 months post-kidney transplantation (KTx) into 2 groups: ADNR and biopsy-proven AR. Controls (C) included KTR with no ADNR or AR within 24 months post-KTx. BK virus nephropathy and primary nonfunction were excluded. Glomerular filtration rate (eGFR) was estimated using MDRD equation. Linear mixed models established intercepts and slopes of eGFR decline from 6 to 24 months post-KTx. Cubic spline analysis calculated the percentage of patients with >30% reduction of eGFR from 6 to 24 months post-KTx. The mean age (years) at KTx was 50.2 ± 14.2, 47.9 ± 17.8 and 53.6 ± 12.4 for ADNR *(n* = 93), AR *(n* = 22) and C *(n* = 135), respectively. The female/male ratio was 39.8% (ADNR), 45.5% (AR) et 34.1 (C). The rate of delayed graft function was not significantly different among groups. The median time for for-cause graft biopsy was 22 [10-70] and 13 [7-43] days post-KTx for ADNR and AR, respectively. ADNR included 21 "borderline" cases. At 6 months post-KTx, eGFR was higher in C (55.2 ± 1.6 ml/min) vs. ADNR (45.5 ± 1.9 ml/min; $p < 0.05$) and vs. AR (48.6 ± 3.9 ml/min; p, 0.13). The eGFR slope from 6 to 24 months post-KTx was positive in C (0.16 ± 0.06 ml/min/month) compared to negative slopes in ADNR (-0.04 ± 0.08 ml/min/month, $p < 0.05$) and in AR (-0.04 ± 0.16 ml/min/month, p, 0.26). The proportion of KTR presenting with >30% reduction of eGFR from 6 to 24 months post-KTx reached 7.4% in C vs 25.8% in ADNR ($p < 0.05$) and 19.1% in AR ($p < 0.05$). In the present cohort, ADNR occurs frequently and early post KTx, and is associated with a significantly lower eGFR at 6 months and a significantly faster eGFR decline from 6 to 24 months post KTx, in comparison to controls.