Kidney transplantation in patients more than 70-year-old: right for the patient, wrong for the organ? - A single centre study

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Introduction

It remains unclear if it is appropriate to offer Kidney transplantation routinely for patients over the age of 70.

Methods

This was a retrospective cohort study. We analysed data from 21 patients aged 70 years or above at the time of transplantation from years 2008-2015. These patients were accepted for transplant after they passed tests performed according to our high cardio-vascular risk protocol. Our transplant immunosuppression protocol does not take into account patient age; patients are grouped as low or high immunological risk irrespective of age and receive Basiliximab induction, Tacrolimus, Mycophenolate mofetil (1g BD, reduced to 500mg BD after 30 days) with steroid withdrawal on D7 in low risk patients. We collected data from EPR to analyse 1y and 5y patient and death censored graft survival and graft function.

Results

N=21, 19 were first transplants and 2 had one previous transplant. Mean age 72.38 (Range 70-77y). 6 LD, 1 DBD, 14 DCD donors. 4 died during 1st year- 80.9% 1y patient survival, 94% 1y death-censored graft survival, 1 died in year 2 post Tx, 16 patients survived at 5 years - 76.19% 5y patient survival, 100% death censored graft survival. 9 patients are alive to date (January 2020) all with functioning grafts. To date, 12 patients died (mean age 73.25Y, 3LD, 9DCD, mean age at death 77.16 (72-85). Mean 1y eGFR was 43.22ml/min and at 5y it was 42.88/min.

Discussion

We found that in transplant recipients aged 70 and above, both 1y (80.9%) and 5y patient (76.19%) survivals were inferior compared to data from the overall transplant cohort that includes all age groups (local audit data of 96-100% 1y patient survival and registry data of 93% 5y patient survival for our centre). Majority of the deaths occurred within 1y post-transplant. However, death censored graft survivals were comparable to overall cohort suggesting that in those who survive, the transplant kidney functions well with acceptable 1y and 5y eGFRs and keeps them dialysis independent.

The renal registry data of 2014 cohort for patients over 65 on dialysis shows 1y patient survival 80% (comparable to 1y survival of our transplant cohort) and 45% 5y patient survival (in contrast to 76.19% 5y patient survival in our cohort). In summary, transplant patients over the age of 70y have similar 1y but superior 5y patient survival compared to those on dialysis but inferior 1 and 5y survival rates compared to overall transplant cohort.