Outcomes of adult kidney transplant recipients at Charlotte Maxeke Johannesburg Academic Hospital between 01 January 2012 and 31 January 2020

Kyle Schnaar^{1,2}, Graham Paget^{1,2}, Nina Diana^{1,2}

¹Charlotte Maxeke Johannesburg Academic Hospital, Johannesburg, South Africa

Abstract

Background: In end stage kidney disease patients kidney transplantation provides a survival benefit over long term dialysis. Kidney transplantation is complex, and outcomes are dependent on several donor and recipient factors.

Methods: This study was a single centre retrospective record review of all first-time adult renal transplant recipients from 01 January 2012 to 31 January 2020. Data collected included demographic and clinical parameters. Complications post transplantation was noted. Outcome end points were recipient death and graft loss (defined by the need to return to dialysis).

Results: 167 patients over the age of 18 years received renal transplants at our centre between 1 January 2012 and 31 January 2020, 140 patients were included, of which 94 (67.1%) were male and 46 (32.9%) female. Mean age at time of transplant was 41.9 ± 10.5 years. 10 (7.1%) were living with HIV. 128 (91.4%) received a cadaveric transplant and 12 (8.6%) received a living donor transplant. 63 (45.0%) patients experienced delayed graft function, of which 45 (71.0%) required dialysis support. Median time to discharge was 18 days (IQR 11-32 days). Within the first 3 months post-transplant 95 (67.9%) patients were readmitted, 20 (14.3%) for urosepsis. 7 (5%) recipients developed a malignancy. 39 (27.9%) recipients developed new onset diabetes after transplantation. 48 (34.3%) patients experienced graft loss with a median time to loss of 30.5 months (IQR 10.5-52 months). During the 8-year period 40 patients (28.6%) demised, 16 (40%) of these patients had concomitant graft loss.

Conclusion: Whilst 65% of recipients had a functioning graft at 3 years, further studies are required to determine factors influencing long term graft outcomes in our population.

²University of Witwatersrand, Johannesburg, South Africa