

The first 100 days: a single centre experience of the updated 2019 NHSBT kidney transplant allocation policy

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Introduction:

In 2019, the NHSBT allocation system for deceased donor kidneys was updated to prioritise highly sensitised patients and those with high matchability scores (MS). The aim was to address inequalities in waiting time for highly sensitised or difficult to match patients, and to improve disparity between Caucasian and Black, Asian and minority ethnic (BAME) kidney patients on the waiting list.

Methods:

The new allocation system was introduced in September 2019, resulting in an immediate increase in the number of offers for patients with high MS. We undertook urgent multi-disciplinary review of all patients on our transplant waiting list with MS 8-10 to i) identify those for whom a 2-2-2 mismatched graft was deemed unacceptable ii) to update their acceptable mismatch accordingly to reduce the number of unsuitable offers and iii) to review after 1 year to ensure that this did not significantly limit access to transplantation. After 100 days of the new allocation system, we performed a retrospective analysis of our patients with high MS to assess the impact of the allocation update and the outcomes of transplants performed in this population.

Results:

We identified N=118 patients active on our kidney transplant waiting list with MS 8-10, representing approximately one third of our population. 46% were female, median age 48 yr, median CRF 100% and median waiting time 1900 days. The matchability scores were: 8 (36%), 9 (27%) and 10 (37%). After MDT review, we changed the acceptable mismatch from 2-2-2 to 2-2-1 in N=61 (52%) patients. During the first 100 days of the new allocation system, we performed 47 deceased donor kidney transplants, with 47% BAME recipients compared to 25 and 36% respectively during the same period in 2018. N = 22 transplants were in patients with MS 8-10 (19% of high MS patients). 45% of these transplants occurred in patients with MS 10, 59% were Level 4 mismatches and there was a non-significant trend towards more transplants in blood group B recipients. 32% of transplants were in patients whose acceptable mismatch had been changed to 2-2-1. The age mismatch between donor and recipient exceeded 25 years in N=3 cases. There were 2 episodes of early graft loss (1 thrombosis, 1 death with a functioning graft). There were 2 episodes of early rejection (1 Banff 1B and 1 Banff 2A), both successfully treated. The median eGFR was 48 ml/min after a median follow up period of 3 months.

Conclusions:

The updated allocation policy has led to prompt transplantation in approximately 20% of our highly sensitised and difficult to match wait-listed patients with favourable short term outcomes. More transplants were performed compared to 2018, and in a higher number of BAME recipients. MDT review of all patients with MS 8-10 has limited the number of offers which may have posed an unacceptable immunological risk.

Further follow up and ongoing assessment is required to establish the longer term implications of the policy change.