

Live Donor Renal Transplantation Cross Matches in 2016 in New Zealand and their Outcomes to Transplantation

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Abstract

Objective

Tissue cross match is an important part of live donor kidney transplant (LDKT) work up and is a costly resource with significant wait times. The aim of this study was to review the cross matches performed for the purpose of live kidney donation in the year 2016 in New Zealand and the outcomes of these donor and recipient pairs.

Material and Methods

A nationwide retrospective audit of the cross matches performed for LDKT work up in 2016 was performed. The outcome of each match with regards to whether transplantation occurred, reasons for not proceeding, entrance into the paired kidney exchange programme was then obtained from electronic patient records and liaison with respective transplant co-ordinators.

Results

A total of 269 cross matches were analysed from a total of 208 patients and 225 donors. 157 (58.6%) cross matches resulted in transplantation, and 112 (41.6%) were not transplanted. The most common reason for not proceeding to transplantation was a positive cross match (42.0%) followed by donor deemed not suitable (20.5%) and recipient not suitable for transplantation (10.7%). 23 cross matches were deemed avoidable based on reasons that could have been identified earlier in the work up process or unclear reasons for proceeding. Uptake of the paired kidney exchange programme by positively matched pairs was 27.6%. There were no significant differences in outcomes to transplant across the different district health boards.

Conclusion

Overall, there was an appropriate use of cross matches for work up for live donor kidney transplantation with few cases where cross matches could have been saved. Uptake of the paired kidney exchange is low and is an area that could be worked on to improve transplant outcomes of cross matches performed.