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The new Eurotransplant kidney allocation system: a justified balance between equity and utility?

Received: 17 February 1999
Accepted: 28 May 1999

Sir: We have read with interest the article 'Experience with the Wujciak-Opelz allocation system in a single center: an increase in HLA-DR mismatching and in early occurring acute rejection episodes' by the renal transplant program Brussels – Erasme [6]. The authors reported that they experienced a greater number of, and also more severe, rejection episodes during the first post-transplant month under the new Eurotransplant (ET) kidney allocation system [4] than under the old one. HLA-DR mismatches were also found to be more numerous with respect to the new system.

It is indeed true that the new kidney allocation system has redistributed the number of HLA-DR mismatches (cf. [6], Table 1); this was mainly a shift from zero HLA-DR mismatches (63%) to one HLA-DR mismatch (50%), though without changing the overall HLA-A,B,DR mismatch distribution significantly [1]. Unfortunately, the authors fail to demonstrate the direct link between the HLA-DR mismatch redistribution and their higher incidence of early occurring rejection episodes. They only *logically* establish an association of the two phenomena. A two-by-two table of incidence of rejection in relation to HLA-DR mismatch is missing.

We do not negate the beneficial effect of HLA-DR matching during the first post-transplant months, even

when the end point is 'rejection' instead of the more common end point 'graft survival'. It should, however, be added that there is often no distinction between the graft survival of renal transplants with no and those with one HLA-DR mismatch [3]. This finding, in addition to data from the CTS study, supported the notion that less attention could be paid to HLA-DR mismatching under the new ET kidney allocation system, while aiming at maintaining or even improving the overall HLA-A,B,DR match; in the simulation studies, the latter parameter was used as a surrogate for graft outcome at one year after transplantation [7].

The authors have regularly advocated the concept of 'nonimmunogenic' HLA-DR mismatches [5]. It is true that they had more opportunity to select transplant candidates with 'nonimmunogenic' HLA-DR mismatches under the previous ET allocation system. It would therefore be interesting to know whether there was a higher percentage of 'immunogenic' HLA-DR mismatches under the new ET system, and its relation with rejection incidence. If there was, this might greatly support the authors concept and, indeed, might lead to a re-consideration of HLA-matching policies, as proposed by them [2].

Focussing criticism of the new ET kidney allocation system on the poorer HLA-DR matching seems to be unjustified. The new ET kidney allocation system is able to offset the disadvantages of the previous 'exclusively HLA-driven' system [1], namely:

1. Patients with a long waiting time, and patients with a low chance of a good HLA-A,B,DR match, have a better chance of undergoing transplantation.
2. A more appropriate donor kidney exchange mechanism between the participating countries was realized.

3. Pediatric recipients have shorter waiting times until transplantation.

It should be mentioned that, as a result of the introduction of the new ET kidney allocation system, transplantation was performed on a patient population that is not comparable to that treated under the former allocation system. We can only speculate that this different population might also be responsible for the altered occurrence of early rejection episodes.

Whether the current findings, if confirmed by more elaborate analysis, should lead to an adaptation of the new ET kidney allocation system will remain a matter of debate. Today, the aim of allocation is to offer all renal transplant candidates a similar opportunity of receiving a kidney, even those who are known to have a lower graft outcome, e.g., highly immunized patients and, those requiring re-transplantation, or those whose life expectancy is lower, e.g., elderly patients. Applying the criteria the authors suggest indirectly, i.e., giving full priority to HLA-matching, would prevent many patients from receiving a renal transplant, in particular those with rare phenotypes, homozygous HLA loci, those from non-Caucasian origin, and others. Such an allocation system is not accepted by the governmental bodies and the general public.

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