

人類白血球組織抗原吻合程度對心臟移植之影響
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Human leukocyte antigen matching in heart transplantation

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Purpose:

Human leukocyte antigen (HLA) antibodies represent a significant risk factor for transplant failure. In addition, allocation of donors with regard to HLA is still controversial in heart transplantation. We examine the impact of HLA compatibility on survival, rate of rejections, and infections in patients after heart transplantation (HTx).

Materials and Methods:

We carried out a retrospective analysis of 100 consecutive patients who underwent heart transplantation in our center from January 2002 to April 2015. According to degree of HLA-A, B and DR matching the patients were divided in two groups, Group A (n=42) with miss-matching 0-4 and group B (n=46) with miss-matching 5-6. There was no significant difference in demographic parameters between recipients and donors.

Results:

We found no difference in long term survival between Group A and Group B. Comparing the levels of tacrolimus or cyclosporine A during the period of 12 months after the HTx, we only found a trend toward lower level of tacrolimus in Group B. The rates of one-year rejections or infections between Group A and Group B (AR: 17 (40.48%) vs. 21 (45.65%), $P=0.05$; infections: 17 (40.48%) vs. 17 (36.96%) $P=0.08$).

Conclusion:

Based on the results of our single-center trial, we found no impact of higher degree of HLA-A,-B, and -DR matching on survival, rejection episodes or infection. Further large studies are necessary to confirm our hypothesis that subjects with better HLA compatibility could require lower dose immunosuppression.