AS2-3 Asian Session2

Rebounding of non-donor specific anti-ABO antibody as the evidence of kidney allograft accommodation

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Background: Double filtration plasmapheresis(DFPP) effectively decreases anti-ABO. Rebounding of anti-ABO after transplantation without any pathological sign of allograft damage has been described. We report the indirect evidences of accommodation after ABOi kidney transplantation.
Method: Among seven cases of ABOi, there are three blood type O recipients received kidney from A or B donor. DFPP, together with rituximab, can successfully decreased anti-ABO targeted titer. Post-transplant rebounding of both anti-A and anti-B indicates reactivation of plasma cells.
Results: During post-transplant follow up, the anti-ABO antibodies which are donors specific(e.g. the anti-A in transplant from type A donor to O recipient) were remained ≤1:16. Interestingly, the non-donor specific anti-ABO antibodies (e.g. anti-B in transplant from type A donor to O recipient) were gradually increase to titer between 1:128-1:512. The protocol biopsy reveals C4d 3+. All recipients have no pathological sign of rejection. The strongly positive C4d staining together with the low level of donor specific anti-ABO. The increasing of non-donor specific anti-ABO indicate the activation of the whole set of plasma cell. These finding can be explained by the accommodation.
Conclusion: The accommodation in ABOi kidney transplantation is a unique phenomenon. We assume that the low level of donor-specific anti-ABO cause by allograft absorption of the antibody. Close follow up with surveillance biopsy is the best approach.

利益相反：なし

AS2-4 Asian Session2

Comparing outcomes of ABO incompatible to DSA positive/CDC-AHG negative kidney transplant

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Back ground: Plasmapheresis (PE) and double filtration plasmapheresis (DFPP) play major role in pre-transplant desensitization protocols for kidney transplant recipient with ABO incompatible (ABOi) or preexisting donor specific antibody (DSA). We evaluated the outcomes of desensitization protocols in recipients with ABOi living donor and living donor with pre-transplant DSA (lvDSA). While deceased donor transplant with pre-transplant DSA (dcDSA) underwent transplant without desensitization.
Method: All recipients who kidney transplanted with ABOi or pre-transplant DSA positive were evaluated. DSA was detected by solid phase binding assay. All patients were negative on CDC-AHG crossmatch. Both ABOi and lvDSA were underwent desensitization which consist of DFPP/PE and rituximab. Basiliximab or thymoglobulin was used for induction in ABOi and DSA groups, respectively. The maintenance immunosuppressive drugs are tacrolimus, mycophenolate, and prednisolone. Protocol biopsy was performed at 6 months
Results: There were 7, 12, and 13 recipients in ABOi, lvDSA, and dcDSA groups, respectively. The antibody rejections (both clinical and subclinical) were found 0%, 9%, and 53% ($p<0.05$). Serum Cr 6 month were 1.27 ± 0.36, 1.31 ± 0.31 and 1.46 ± 0.29 mg/dL (p=NS). C4d3+ was found in 67% of ABOi while 70% of lvDSA has C4d0. All of dcDSA has positive C4d staining ($p<0.05$).
Conclusion: Desensitization in living donor with ABOi or pre-transplant DSA is effective. Without desensitization, deceased donor transplant recipients with pre-transplant DSA has unacceptable rate of antibody mediated rejection.

利益相反：なし