Kidney IV - Overcoming Immunological Barrier

Transplantation across immunological barrier

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Although the biggest immunological barrier in kidney transplantation is currently considered to be ABO/HLA-incompatible kidney transplantation (ABO/HLA-IKT), ABO/HLA-IKT could be the one of the most effective options to expand donor pool. In Japan, 30%-40% of living kidney transplantation are ABO-ILKT. However, ABO/HLA-IKT seems to be recognized as a difficult treatment option requiring heavy desensitization treatment and intensive immunosuppression. This intensive treatment causes adverse events including bleeding and infectious complications, and in poorer outcome compared to ABO/HLA-compatible kidney transplantation (ABO/HLA-CKT). In many countries, donor exchange program is currently prevalent to overcome treatment ABO/HLA-IKT combination for avoiding desensitization and intensive immunosuppression. However, donor exchange program cannot always resolve ABO/HLA-IKT and current improvement of immunosuppressive treatment improves the outcome of ABO/HLA-IKT. Outcome of ABO/HLA-IKT has became better and better compared to previous one because we are doing those transplant with less desensitization and less immunosuppression. In this session, I would like to share the information of recent treatment and outcome of ABO/HLA-IKT.