

Submission No. : KT02-0001

Session Title : Kidney Transplantation 2

Session Topic : Organ Shortage and Equity Issues in Kidney Transplantation

Date & Time, Place : June 15 (Sat) / 10:30-12:00 / Room 5 (202)

ABO incompatible Kidney Transplantation in Asia.

Yoshihiko Watarai

Japanese Red Cross Aichi medical Center Nagoya Daini Hospital, Japan

Under the severe shortage of cadaveric organ donors in Japan, ABO-incompatible Kidney Transplantation (ABOi-KTx) has been developed to expand the donor pool after the convincing report in 1986. In 1989, Takahashi K and his colleagues have started ABOi-KTx program and thereafter other Japanese Transplant programs also started ABOi-KTx programs resulted in drastic increase in number. In last decade, nearly 30% of all living kidney transplantation in Japan are ABOi-KTx (424 cases among 1488 all Living KTx in 2022). In other Asian countries, 17.4%(n=1,069) of all transplants in Korea were ABOi-KTx between 2014 and 2019, and 6.0% (n=100) in west Chinese transplant center. While ABOi-KTx is not addressed in Taiwan registry data between 2010 and 2018. During earlier days in ABOi-KTx, especially before 2000, the desensitization protocol was consisted with splenectomy and without mycophenolate mofetile (MMF). Graft survival of ABOi-KTx was significantly inferior to the graft survival of ABO compatible kidney transplantation (ABOc-KTx). The higher titer of anti-donor blood group antibody (>1:64x IgG) before transplantation had correlated with higher incidence of antibody mediated rejection (ABMR) rate (over 30%) and inferior graft survival. After the introduction of MMF and rituximab without splenectomy in newer immunosuppression desensitization protocols, the impacts of pretransplant titer on ABMR rate and inferior graft survival have been reduced significantly. Once graft survival of ABOi-KTx has reported to be equivalent to ABOc-KTx by single-center analysis. However, a global meta-analysis and other Asian cohort studies have resulted in higher infection-related mortality and lower early graft survival rate in ABOi-KTx. Current attempts have been intended to reduce modest difference of clinical outcomes between ABOi-KTx and ABOc-KTx. Reduced intense or dose of immunosuppression and strict monitoring/prophylactic management of infection have been implicated for recipient's care for further improvement of clinical outcomes after ABOi-KTx.



APCN & KSN 2024

June 13(Thu) - 16(Sun), 2024 Coex, Seoul, Korea



*Promoting Sustainable Kidney Health:
The Asia-Pacific and Beyond*

Keywords: ABO incompatible, Acute antibody mediated rejection, desensitization, graft survival