



Incidence of postoperative cytomegalovirus and BK-polyoma virus infections and graft loss in ABO-incompatible renal transplant recipients: a multicenter retrospective study

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Abstract

Objectives The current study aimed to examine the incidence of perioperative infections and graft viability in ABO-compatible and ABO-incompatible renal transplant recipients.

Methods We included 643 living donor renal transplant recipients registered in the Michinoku Renal Transplant Network from 1998 to 2021. Patients were divided into the ABO-compatible and ABO-incompatible kidney transplantation groups. We compared the characteristics of the two groups and evaluated the incidence of postoperative viral infections (cytomegalovirus and BK virus), graft loss-free survival, and overall survival between the two groups.

Results Of 643 patients, 485 (75%) and 158 (25%) were ABO-compatible and ABO-incompatible renal transplant recipients, respectively. Postoperative viral infections, rituximab use, and plasma exchange were significantly more common in ABO-incompatible than in ABO-compatible transplant recipients. However, there were no significant differences in terms of other background characteristics. The ABO-incompatible group was more likely to develop viral infections than the ABO-compatible group. Graft loss-free survival and overall survival did not significantly differ between the two groups. According to the multivariate Cox regression analysis, ABO compatibility was not significantly associated with graft loss-free survival and overall survival.

Conclusion Although the incidence of postoperative viral infections in ABO-incompatible renal transplant recipients increased, there was no significant difference in terms of rejection events, graft loss-free survival, and overall survival.

Keywords ABO-incompatible · Infection · Mortality · Rejection

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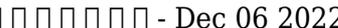
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