

## 혈액형 불일치 신장 이식에서 항 ABO 항체의 기저 역가가 고역가인 군과 저역가인 군간의 임상 양상 비교

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정병하, 홍유아, 김현경, 최선령, 선인오, 박훈석, 최범순, 박철휘, 김용수, 양철우

### Comparison of Clinical Outcome between High and Low Baseline Anti-ABO Antibody Titer in ABO Incompatible Kidney Transplantation

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**Backgrounds:** High baseline anti-ABO antibody titer is still an important obstacle for successful ABO-incompatible kidney transplantation (ABO IKT). This study aims to investigate the clinical outcome of ABO IKT in patients with a high baseline titer in comparison with patients with a low baseline titer.

**Methods:** Eighteen patients who received ABO IKT at our center were classified as the high-titer group ( $\geq 1:256$ ,  $n=10$ ) or the low-titer group ( $\leq 1:128$ ,  $n=8$ ). We used a protocol composed of rituximab, plasmapheresis, and intravenous immunoglobulin (PP/IVIG). We compared the intensity of preparation, complications, and clinical outcome between the 2 groups.

**Results:** The mean follow up period was  $11.8 \pm 5.8$  months. The high-titer group required more sessions of pre-transplant ( $10.5 \pm 3.5$  vs.  $6.0 \pm 1.3$  times,  $p=0.01$ ) and post-transplant ( $1.6 \pm 1.8$  vs.  $0 \pm 0$  times) PP/IVIG than the low-titer group did. All patients from both groups showed immediate recovery of graft function. The antibody titer and allograft function in the high-titer group were stable and did not differ significantly from those of the low-titer group up to 1 year after KT. There was one antibody-mediated rejection and 3 cases of acute T cell mediated rejection in the high-titer group. The high-titer group showed 2 cases of opportunistic viral infection (herpes gingivitis and cytomegalovirus viremia) and 1 case of graft loss due to postoperative bleeding. In contrast, there have been no cases of antibody-mediated rejection and opportunistic infection in the low titer group.

**Conclusion:** ABO IKT can be safely performed even in patients with a high baseline anti-ABO antibody titer, but the risk for infection and bleeding should be considered before transplantation.

**Key Words:** 신장 이식, 항 ABO 항체, 혈액형 불일치

Kidney transplantation, Anti-ABO antibody, ABO mismatch