

## Impact of ABO Compatibility in Elderly Kidney Transplant Recipients

**Introduction and Objectives:** Recently, ABO incompatible kidney transplantation (ABO-IN Tx) has been performed in patients with various backgrounds such as the elderly and unrelated combination. We compared the outcomes of ABO-IN Tx in patients aged  $\geq 60$  years with in younger patients.

**Materials and Methods:** Twenty-four consecutive ABO-IN Tx recipients were included. Patients were divided in two groups according to the recipient age: G1 ( $\geq 60$  yrs, n=9), and G2 ( $< 60$  yrs, n=15). Mean recipient/donor age were  $63.9 \pm 2.8 / 63.4 \pm 5.0$  yrs in G1 and  $46.5 \pm 10.5 / 54.1 \pm 10.4$  yrs in G2. Mean duration of dialysis was  $58.9 \pm 46.5$  months in G1 and  $25.9 \pm 22.9$  months in G2, respectively. We compared the difference in the patient and graft survival, and complications, such as acute rejection, cytomegalovirus infection, and surgical complications between the groups. All patients received desensitization treatment with plasmapheresis until pre-transplant ABO IgG titers became  $< 16$ . Two patients of G1 and 3 patients of G2 received rituximab before transplantation and others underwent splenectomy at the time of transplantation.

**Results:** The patient/graft survival (death censored) were 100%/100% at 1, 3 year(s) in G1, 100%/100% at 1 year and 93%/100% at 3 years in G2. Acute rejection occurred in 2 (22%) of G1 and 2 (13%) of G2. The incidence of cytomegalovirus antigenemia was 67% in G1 and 80% in G2. Surgical complications occurred 3 (33%) of G1 and 4 (27%) of G2. The serum creatinine at 1 year after transplantation was 1.1 mg/dl in both groups.

**Conclusion:** The patient and graft survival, complications, and serum creatinine at 1 year after transplantation were same in both groups. ABO incompatibility had no negative impact on the outcome of kidney transplantation in the elderly.