

## **Outcome of Spousal Kidney Transplantation: A Single Center Experience**

**Introduction and Objective:** Due to the severe shortage of deceased donors in Japan, living donor kidney transplantation is mainly performed in Japan. According to the Japanese renal transplant registry of 2010, there were 1,276 living kidney transplantations including 37.1% from spouses. We summarized our experience with living unrelated kidney transplantation between spouses.

**Materials and Methods:** A total of 127 patients with end-stage renal disease underwent living donor kidney transplantation at Osaka City University Hospital between January 2001 and February 2012, of which 51 cases were kidney transplantation between spouses. ABO-incompatible kidney transplantation was performed in 18 of the 51 cases. We analyzed these recipients, focusing on the immunosuppressive protocols, complications, and patient/graft survivals.

**Results:** Patient and graft survival rates were 100%. One patient experienced antibody-mediated rejection and intractable acute cellular rejection, one had antibody-mediated rejection, and one had an intractable acute cellular rejection episode that was treated using OKT-3. The incidence of acute rejection was 19.6%. There were no severe complications among the recipients.

**Conclusions:** Previously, living unrelated kidney transplantation between spouses has met with some opposition due to poor tissue antigen compatibility and fear of commercialization. Recent significant improvements in immunosuppression and recipient care indicate that it has become a viable treatment option in Japan, which lacks deceased donors.