

Is Husband is a Bad Kidney Donor for his Wife?

Yamamoto H et al , 2009 reported accelerated acute rejection in an ABO- compatible Kidney transplant in a women received the from 5/6 mismatched husband with Pre-transplant negative CMs. They reported their case under the title :

A case of accelerated acute rejection after ABO-ompatible living unrelated kidneytransplantation

A 59-yr-old Japanese woman with chronic renal failure caused by IgA nephropathy and antineutrophil cytoplasmic antibody (ANCA)-related glomerulonephritis underwent kidney transplantation from a living unrelated spousal donor. The blood type was compatible, while the human leukocyte antigen (HLA) typing showed a 5/6 locus mismatch. She had become pregnant twice by her donor and had never received blood transfusions. Complement-dependent cytotoxicity cross-match, flow cytometry cross-match (FCXM), and flow panel reactive antibody (PRA) were negative.

She initially underwent one week of immunosuppression with mycophenolate mofetil (MMF) and double filtration plasmapheresis (DFPP) immediately before transplantation to reduce the risk of antibody-mediated rejection. Induction therapy consisted of MMF, tacrolimus (TAC), methylprednisolone (MP), and basiliximab. The allograft function was excellent immediately after the operation. However, the urine output and platelet count declined rapidly on post-operative day (POD) 3, while the serum creatinine (sCr) and lactate dehydrogenase levels rose gradually. Subsequently, we could not detect the diastolic arterial flow on Doppler sonography.

They diagnosed accelerated acute rejection and treated her with plasma exchange (PEX), intravenous MP pulse therapy, and rituximab. The first episode biopsy on POD 7 revealed acute vascular rejection and acute antibody-mediated rejection (Banff score AMR II). Her urinary excretion increased beginning on POD 13, while the sCr level decreased gradually and reached 0.9 mg/dL on POD 22. In our retrospective analysis, the LAB screen detected donor-specific antibody (DSA).

kidney transplantation in highly sensitized recipients, such as [husband-to-wife](#) spousal kidney transplantation with a history of pregnancy, the risk of AMR should be put in mind, even if the sensitive antibody detection tests are negative.

Yamamoto H, Kobayashi A, Yamamoto I, Mitome J, Maruyama Y, Hayakawa H, Miyazaki Y, Utsunomiya Y, Hosoya T, Yamaguchi Y.. Clin Transplant 2009; 23 (Suppl. 20): 23–26.