

## EXPERIENCE OF HEART TRANSPLANTATION IN KOREA - 2 CASES REPORT

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We experienced two cases of orthotopic cardiac transplantation in two patients with end stage heart disease.

In the first heart transplantation case, recipient was 50 year old female who had been suffered from NYHA functional class IV cardiac failure and dependent upon intravenous inotropic support for 2 months (recipient category 1). Her preoperative condition was grave with left ventricular ejection fraction of 20% and estimated systolic pulmonary arterial pressure (from Doppler study) was 50 mmHg. The brain-dead donor was 31 year old male with head trauma. The body sizes (weight, height) of the donor/recipient were 70 kg, 165 cm / 43 kg, 160 cm and appropriately overmatched. Preoperatively, identical ABO/Rh blood group (A+) and nonreacting HLA crossmatching were confirmed. On November 11 1992, first cardiac transplantation was performed without complication. Multiple organ procurement team and heart transplantation team were organized the operation schedule appropriately to minimize the ischemic time. The pump time was 126 minutes and aortic cross clamping time of recipient heart was 73 minutes and, as a result, total ischemic time of the transplanted heart was 75 minutes. Postoperatively, the vital signs were stable with minimal inotropic support. The immunosuppressive therapy was commenced from preoperatively and cyclosporine, azathioprine, and corticosteroid were used as a combination therapy as scheduled and monitored with blood drug concentration, WBC count, renal function and most importantly regular endomyocardial biopsy. Now, 9 months after transplantation, the patient is in NYHA functional class II with minimal cardiac drug support.

In the second heart transplantation, the recipient was 23 year old male who had been NYHA functional class IV with pulmonary edema. His preoperative status was severely grave with left ventricular ejection fraction of 10% and estimated systolic pulmonary arterial pressure was 50 mmHg. He has been confined onto bed for more than several months with intravenous inotropic agent. The brain-dead donor was 23 year old male with head trauma. The body sizes (weight, height) of the donor/recipient were 70 kg, 174 cm / 59 kg, 174 cm and appropriately matched. The ABO/Rh blood group of recipient and donor were AB+ and A+ respectively and nonreacting HLA cross matching were confirmed preoperatively. On July 14, 1993, the second cardiac transplantation was performed without complication. Multiple organ procurement (Heart, Liver, Kidney, and Cornea) was done with good cooperation. The pump time was 128 minutes and total ischemic time of transplanted heart was 68 minutes. Postoperatively, the vital signs were stable with minimal inotropic support. Preoperative pulmonary edema was cleared up on the 4th postoperative day. The immunosuppressive therapy was commenced from preoperatively and continued so far as triple therapy.

Now both patients are followed up as outpatient base as scheduled.

Key word : cardiac transplantation