

Intestinal Rehabilitation and Transplantation in Korea

Myung Duk Lee

Professor Emeritus, Pediatric Surgery, Seoul At. Mary's Hospital, The Catholic University of Korea

Fifteen cases of intestinal transplantation (ITx) have been performed at this institution since the first living donor ITx (LDITx) in 2004, at this institution. She received renal transplantation last year from the same living donor (her daughter), and has been doing well for over 11 years with nutritional independency. The care goals for ITx candidates in this institution are 1) cyclic-PN at home with strategic oral feeding, 2) limitation of the IV-lipid <1 g/kg/d, particular for infants, and 3) try to eliminate stoma or tube from GI tract utilizing planned serial transverse enteroplasty (STEP) prior to transplantation. Seven out of 15 cases had jejunostomy, while 3 stomas could be closed before transplantation.

Five children and 10 adults (6-months to 69 years, median; 28 yrs.) are included; three LDITx (one pediatric)/12 deceased donor Itx (DDITx), and 14 isolated Itx (IITx)/one modified multivisceral Tx (MMVTx) in a 2-year-old boy with visceral myopathy. Among 12 DDITx, colon was included to the graft in 10. For the vascular connection to the graft, one splenic and two inferior mesenteric vessels were utilized in all three LDITx. However in DDITx, aorta and inferior vena cava (IVC) were used; with arterial bridge-interposition to the grafts mesenteric arteries in all, and venous conduits to the mesenteric veins in 10 out of 12 DDITx cases. Cold ischemic times of the three LDITx are all within 4 hours, but of 12 DDITx, 10 were within 8 and 2 in 9 hours. Daclizumab, basiliximab or combination with rATG are used for induction, but Tacrolimus monotherapy has been the maintenance immunosuppression. In cases of renal dysfunction, m-TOR inhibitor replacement has been applied since 2009 in 8 cases. For acute cellular rejection (ACR, n=8) (1 LDITx, 7 DDITx), OKT-3 (1) or rATG was applied. One of them was expired because of sepsis. Among three of the antibody-mediated rejections, one was reversed with Rituximab, but the other two were given Rituximab, Bortezomib, plasmapheresis and IV immunoglobulin because of Rituximab resistance, and one of the grafts was finally removed. For a case of chronic rejection at 6 years after LDITx, the graft was salvaged with segmental resection. One case of cutaneous graft-vs-host disease in a MMVT was successfully reversed by steroid. In a case of PTLN with EBV-hepatitis, 5 courses of Rituximab were effective to reduce the mediastinal mass, but remained necrotic tumor was resected by VETS. Causes of 4 early death (within 6 months) are; 1) aortic declamping shock and DIC (5.6 kg BW, DDITx), 2) sepsis and cardiac tamponade in ACR, 3) dysmotility and sepsis after IITx for pseudo-obstruction, and 4) sudden hepatic failure and sepsis.

Estimated overall 1 year patient and graft survivals were 73.33 % (Kaplan-Meier survival curve), respectively. Although limited experiences of Itx, Seoul St. Mary's Hospital became the tertiary center for ITx and rehabilitation in Korea, and its continuous devotion to the patients has been so influential to the government policy makers change the related law on Organ



Advances in Digestive Medicine

December 3-6, 2015 | Taipei, Taiwan

Transplantation and reimbursement policies in this country.