Expanded Liver Donor Criteria Improve Survival

BY KATHLEEN LOUDEN

Contributing Writer

CHICAGO — Extended criteria for liver donor allografts, including the use of living donors, increase access to liver transplantation and significantly reduce waitlist mortality while providing satisfactory outcomes, according to researchers at New York-Presbyterian Hospital.

Allografts that do not meet traditional donor criteria can offer immediate expan-

sion of the donor pool in regions of donor scarcity, said Cindy Kin, a medical student at the hospital and lead author of the study, at the annual Digestive Disease Week. As of August, approximately 2,200 people were waiting for a liver in New York, which is second only to California for the nation's longest wait list, according to the United Network for Organ Sharing (UNOS).

In a study conducted between April 2001 and April 2004, Ms. Kin and her coauthors compared patient access to and outcomes

of liver transplantation between two groups: 128 recipients of primarily traditional donor criteria allografts and 99 recipients of extended donor criteria (EDC) allografts. The latter group included allografts from cadaver donors who were older than 65 years of age at time of death; had cardiac death or a history of cancer; were positive for hepatitis C, hepatitis B core antibody, or human T-lymphotropic virus; had macrovesicular steatosis above 40% or a serum sodium level exceeding 155

mEq/dL; or engaged in high-risk behaviors. Allografts from living donors also were included in the EDC group, as were split-liver cadaver allografts.

Data collected during the 3-year study period revealed that systematic use of EDC in select recipients increased patient access to liver transplantation by 77% and reduced mortality before transplantation by more than 50%, compared with use of primarily traditional donor allografts, Ms. Kin reported

The allocation of EDC livers involved careful selection of patients suited to allograft and advance planning to prepare patients who face potentially long wait times for the use of EDC, Ms. Kin said in an interview.

Biliary complications were more common in living donor transplant recipients, but vascular and wound complications did not vary between groups, she said.

Patient Age Held Critical in Liver Transplantation

PALM BEACH, FLA. — The success of adult-to-adult living donor liver transplants hinges on careful candidate selection with close attention being paid to patient age, Kim Olthoff, M.D., said at the annual meeting of the American Surgical Association.

"Older age and cold ischemic time were associated with adverse outcomes in patients undergoing adult-to-adult living donor transplant. However, graft size was not a factor. Choice of appropriate recipient is critical," explained Dr. Olthoff, principal investigator and surgical director of the liver transplant program at Children's Hospital of Philadelphia.

Dr. Olthoff and her researchers examined data on 354 patients who received adult liver donor transplants at nine different centers. The report formed part of the Adult-to-Adult Living Donor Transplantation (ALDLT) consortium, which aims to evaluate the success of ALDLT.

They found that in the first 90 days after transplantation, 44 grafts failed (18 patients died and 26 required retransplantation). Grafts failed most commonly because of vascular thrombosis, primary nonfunction, recurrent hepatitis, or sepsis. Researchers followed patients for a median of 2.2 years and utilized Cox models to examine the relationship between 35 intraoperative and postoperative variables along with the risk of graft failure. During that time, 7.3% of patients had vascular complications and 21% required further surgery.

The most significant factor predicting higher risk of graft failure was the age of the recipient, with a risk ratio of 1.04 per year and a statistical significance of P less than 0.0001, researchers stated. In addition, they noted that at centers where more than 15 transplants had been performed, the risk of graft failure was reduced by 45%, compared with centers where fewer transplants had been done.



