Twenty-year longitudinal follow-up after liver transplantation: a single-center experience of 251 consecutive cases

Shin Hwang, Chul-Soo Ahn, Deok-Bog Moon, Tae-Yong Ha, Gi-Won Song, Dong-Hwan Jung, Gil-Chun Park, Jung-Man Namgoong, Kyung Mo Kim, Sung-Gyu Lee

Department of Surgery, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea

Background: The outcomes of liver transplantation (LT) has been improved, but the actual 20-year survival data are rarely presented.

Methods: A retrospective analysis of longitudinal follow-up data was performed to evaluate 20-year LT survivors. The institutional LT database was searched to identify patients who underwent primary LT during a 2-year period from January 2000 to December 2001. A study cohort of 251 patients was divided into three groups as adult living donor LT (LDLT; n=207), adult deceased donor LT (DDLT; n=22), and pediatric LT (n=22) groups.

Results: Common primary diseases were hepatitis B virus (HBV)-associated liver cirrhosis (n=177, 85.5%) and fulminant hepatic failure (n=14, 6.8%) in adult LDLT group; HBV-associated liver cirrhosis (n=19, 86.4%) in adult DDLT group; and biliary atresia (n=14, 63.6%) in pediatric LT group. The overall patient survival rates of adult LDLT cohort were 90.8% at 3 months, 86.0% at 1 year, 79.2% at 3 years, 77.3% at 5 years, 72.5% at 10 years, and 62.3% at 20 years, in which hepatocellular carcinoma recurrence, chronic rejection and *de novo* malignancy were the main cause of late patient death. The overall patient survival rates of adult DDLT cohort were 95.5% at 3 months, 86.4% at 1 year, 72.7% at 3 years, 72.7% at 5 years, 72.7% at 10 years, and 68.2% at 20 years. There was no statistical difference in overall patient survival rates between adult LDLT and DDLT groups (P=0.54). The overall patient survival rates of pediatric LT cohort were 95.5% at 3 months, 86.4% at 1 year, 86.4% at 3 years, 81.8% at 5 years, 81.8% at 10 years, and 77.3% at 20 years.

Conclusions: This is the first actual outcome of Korean single-center 20-year survival results of LT. It is necessary to analyze the causes of late graft failure in high-volume multicenter studies.

Corresponding author: Shin Hwang

E-mail: shwang@amc.seoul.kr

© The Korean Society for Transplantation

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.