

OUTCOMES OF LIVER TRANSPLANTATION FROM EXTENDED BRAIN-DEAD DONOR

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Background : Since the first liver transplant (LT) in 2004, a lot of effort has been done to promote the brain-dead LT in Vietnam. In response to the scarcity of potential donors, extended criteria donors have been utilized. Our goal is to assess the effect of this approach on LT outcomes.

Methods : We retrospectively collected patient who underwent DDLT from 05/2012 to 03/2020 in Viet Duc University hospital. Elderly, high BMI, high liver enzymes/bilirubin, peak serum Na >170, hepatitis reactive, cardiac death, CIT >12 hours, ICU stay >5 days, ≥3 vasopressors, alcohol abuse, active meningitis/bacteremia, or significant liver trauma are listed as extended criteria. The primary outcomes were the difference in complications (cholangiopathy, graft dysfunction...) and overall survival, cause of death compared to standard group.

Results : In this study, 45 brain-dead donors were included. Of these, 12 patients (37.8%) met the extended criteria, with the primary factors being a peak serum Na >170 (33.3%) and ICU stays exceeding 5 days (25.0%). Hepatocellular carcinoma (HCC) was the predominant reason for liver transplantation (75.6%), followed by cirrhosis (15.6%). Within the extended criteria group, there were no cases of cholangiopathy, and vascular complications occurred at a rate of 8.3%. The 90-day mortality rate was higher in the extended criteria group (8.3% compared to 0.0%), due to early allograft dysfunction. The 5-year overall survival rate for the standard group was 84.8%, with all deaths related to tumor recurrence. In contrast, all patients in the extended criteria group survived the 5-year period, except for one patient died due to allograft dysfunction and septic shock. There was no significant difference in overall survival between the two groups (p=0.43).

Conclusions : Extended donor, a method to increase the number of LT, might be a good approach without influencing the outcomes. Further study with larger samples is encouraged.

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