

## ADULT-TO-ADULT RIGHT LOBE GRAFT LIVING DONOR LIVER TRANSPLANTATION FOR ACUTE-ON-CHRONIC LIVER FAILURE: A SINGLE-CENTRE RETROSPECTIVE STUDY IN VIETNAM

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**Background** : Acute-on-chronic liver failure (ACLF) has a high mortality rate, and liver transplants are considered a definite treatment for patients with this condition. This study aims to evaluate the outcomes of living donor liver transplantation (LDLT) on ACLF patients in a single center.

**Methods** : This was a retrospective study at the 108 Military Central Hospital, enrolling 88 patients diagnosed with ACLF based on APASL criteria who underwent LDLT with the right lobe graft from December 2019 to December 2024. We utilize the MELD and AARC scores to evaluate and stratify the severity of ACLF.

**Results** : The average age of all patients was  $44.27 \pm 13.61$ . The average BMI was  $21.78 \pm 2.61$ . The most common underlying liver disease is chronic viral hepatitis B (85.2%). The average MELD score of the patients was  $34.90 \pm 5.61$ , with 30.2% having MELD score  $\geq 40$ . In terms of ACLF severity, the average AARC score was  $9.43 \pm 1.68$ . The duration of treatment in the ICU was  $8.59 \pm 7.27$  days, and the length of stay was  $28.02 \pm 13.45$  days. The most common post-transplant complication was biliary complication (19.61%), with a mortality in 22 patients (25%). The survival rates at six months, one year, and three years were 84%, 81.7%, and 81.7%, respectively.

**Conclusions** : Living donor liver transplantation for ACLF patients is safe and has a high post-transplant survival rate. Multidisciplinary care before, during, and after surgery, and the decision to do a liver transplant early, is essential in saving the lives of ACLF patients.

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