

## **Predictive Factors of Early Mortality after Living Donor Liver Transplantation: A Single Center Experience of 780 Cases over 16 Years**

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### **Abstract**

**Introduction:** Living-donor liver transplantation (LDLT) is a complex procedure requiring a special perioperative patients' care. Despite the improvements in the operative techniques and perioperative care, early postoperative mortality remains a disappointing event. The current study is conducted to determine the incidence, causes and potential predictive factors of early postoperative mortality after LDLT.

**Methods:** We reviewed the data of patients who underwent LDLT during the period between May 2004 till October 2020.

**Results:** During the study period, 780 cases underwent LDLT. Early Mortality occurred in 109 cases (14%). We divided our cases into two groups, Early Mortality group (n=109) and Survivors group (n=671). Higher preoperative INR, creatinine, and MELD score were found in Early Mortality group. More blood loss and perioperative transfusions were found in Early Mortality group. Longer ICU stay with higher incidence of pulmonary and vascular complications were found in Early Mortality group. Preoperative MELD score, blood transfusion, pulmonary complications, and vascular complications were significant predictors of early mortality in multivariate analysis.

**Conclusion:** Reduction of perioperative transfusions together with early detection and management of vascular and respiratory complications are essential to reduce early mortality after LDLT.

**Key words:** living-donor liver transplantation, early mortality, MELD score, blood transfusion