

Prognostic Factors of Recurrence and Survival After Living-donor Liver Transplantation for Hepatocellular Carcinoma: Mansoura Experience

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ABSTRACT

Background: To evaluate our center experience of living-donor liver transplantation (LDLT) in hepatocellular carcinoma (HCC) patients regarding recipients' mortality and morbidity and study the various prognostic factor affecting tumor recurrence and its impact on patients' survival.

Methods: This is a retrospective study including patients who underwent LDLT for HCC complicating liver cirrhosis in period from 2004 to 2020.

Results: The study included 252 patients. The mean age was 52 ± 6 years. All patients had underlying liver cirrhosis with hepatitis C virus in 241 patients (95.6%). The mean MELD score was 14 ± 4 and mean alpha-feto protein (a-FP) 73 ± 178 ng/ml. 138 patients (54.8%) subjected to preoperative loco-regional therapy. The patients received right hemi-liver graft without the middle Hepatic vein. The mean graft weight was 911 ± 181 gm and mean GRWR 1.9 ± 0.3 . Morbidity occurred in 86 patients (34.1%). Mortality occurred in 71 patients (28.1%). The mean follow-up duration ranged from 6 – 173 months. The 1-, 3-, and 5-year disease-free survival rate was 93%, 85%, and 78%, respectively. Multivariate analysis shows that the only significant factor for tumor recurrence are vascular invasion a-FP>200 ng/ml.

Conclusion: LDLT solve the problem of organ shortage and dropout of the list, however, recurrence of the tumors, still a major problem affecting recipients' survival.

Key words: hepatocellular carcinoma, living-donor liver transplantation, tumor recurrence