

Outcome of Liver Transplantation for Hepatocellular Carcinoma – A Single Center Experience

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Abstract

Background & Aims: Liver transplantation (LT) is a promising treatment for patients with liver cirrhosis associated with hepatocellular carcinoma (HCC). The aim of our study was to evaluate our experience regarding the clinical and pathological staging of HCC in patients who underwent LT, as well as recurrence free and overall survival.

Methods: From January 2006 to December 2011, 38 patients with diagnosis of HCC, underwent LT in our Center. Demographic, clinical, imaging and pathologic information were recorded. A Cox proportional hazards survival analysis was performed in order to identify significant predictors of tumor recurrence and patient's death after LT.

Results: Eighteen patients (47.4%) in our study group were within Milan criteria. The mean follow-up was 22 months and the recurrence rate of HCC after LT was 13.2%. The 1, 3-year recurrence free survival rates were 85%, 74.3% respectively. The 1 and 3-year overall survival rates were 83.5% and 63.6% respectively. No significant predictor for HCC recurrence was identified in our study group by survival analysis, taking into account 13 different variables. As independent predictors of patient's death after LT for HCC however, the presence of diabetes mellitus ($p=0.001$), presence of more than 3 HCC nodules ($p=0.03$) and tumor recurrence after LT ($p=0.03$) were identified by multivariate Cox proportional hazards survival analysis.

Conclusion: In our cohort HCC recurrence rate after LT was 13.2%. Diabetes mellitus, presence of more than 3 HCC nodules and HCC recurrence were significant predictors of poor overall survival after LT.

Key words: liver transplantation, hepatocellular carcinoma, tumor recurrence, survival, predictive factors

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