

**RECURRENT DISEASE AFTER LIVING DONOR LIVER TRANSPLANTATION:
RISK FACTORS, MANAGEMENT AND OUTCOME.**

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Background and Aim: The threat to the success of liver transplantation is the recurrence of the original disease. Although the initial concern about recurrent disease mainly related to viral hepatitis, recurrence of nonviral disease was found. This study aimed to analyze the factors responsible for disease recurrence after LDLT. And the effect of disease recurrence, and its management on the outcome of LT.

Subjects and Methods: After exclusion of (6 months mortality), 45 alive transplanted patients were enrolled in the current analysis in the follow up duration from 6 months to 60 months post LT. (The demographic, preoperative, intraoperative, and postoperative data) were studied in a descriptive study of pediatrics and adults. Univariate analysis and then multiple analysis were done to detect the relationship between the previous data and overall recurrence, and between recurrence variables, and total survival in adults in the follow up period.

Results: Sixty nine patients underwent LDLT in our institute from the start of LDLT program at 28 April 2003 until the end of December 2009. The present retrospective study included forty five patients in the follow up duration from 6 months to 60 months. The forty five patients were classified according to age into pediatrics <18 years, and adults >18 years. The pediatric group were fourteen patients (31.1%), and the incidence of recurrence of primary disease was 1/14 (7.1%), this case was Budd Chiari syndrome. The all pediatric mortality was 4/14 (28.6%). The adult group were thirty one patients (68.8%), and the incidence of recurrence was 15/31 (48.4%) of patients. On univariate analysis, there was no statistically significant predictors of recurrence regarding (demographic, Preoperative, intraoperative, and postoperative data). The

survival of all, non recurrent, and recurrent adults was (83.9%), (93.7%), and (73.3%) respectively.

Conclusion: Recurrence of primary disease after LDLT is confirmed in our study with the least incidence in children and the highest in adult HCV patients. Similarly, it was higher in the following patients (males, with CMV infections, with co-morbidity, with post operative complications, and patients with acute rejection). Recurrence of primary disease after liver transplantation decreases post transplantation Survival. However the effective management of recurrence improves post transplantation survival, The hospital mortality post LDLT was the highest mortality, and this was due to (vascular, rejection, and septic complications) accordingly, most efforts should be paid to this critical period to decrease such increased mortality.