DETERMINANTS OF RECURRENT HEPATOCELLULAR CARCINOMA AFTER LIVER TRANSPLANTATION

A Abu Shanab, N Starr, Z Hutchinson, J Hegarty, A McCormick, R Merriman
Liver Unit, St. Vincent’s University Hospital, Dublin, Ireland

Introduction The outcome of orthotopic liver transplantation (OLT) for hepatocellular carcinoma (HCC) depends significantly on pre-OLT radiologic stage. Other putative factors such as Lymphovascular invasion (LVI), peak pre-OLT AFP level, the need for down-staging and short waiting times on OLT list are less well-defined.

Aims/Background To characterize the factors associated with recurrent HCC in patients after OLT with short waiting times.

Method Retrospective cohort data analysis of patients with HCC who had OLT in a single centre from 2002–2011. Pre- and post-OLT variables were studied that included clinical characteristics, pre-OLT radiologic staging, explant pathological stage, tumour markers, use of ablative therapy and waiting times.

Results Sixty-eight patients with HCC had OLT for HCC from 2002–2011. Recurrent HCC occurred in 8/68 patients (11.7%), male (6), mean age 60. For these with recurrent HCC, the median waiting time was 2.5 months. Pre-OLT locoregional therapy occurred in 50%. All patients had stage T2 HCC pre-OLT (without downstaging). Three of 8 patients had an elevated AFP >500 pre-OLT. Pathological staging was pT2 in 62.5%, (two pT3, one pT1) that were moderately differentiated in 56% and with LVI in 25%. All 3 patients with high AFP and two without high AFPs pre-OLT developed high AFPs with recurrent HCC. No significant differences in waiting times and a pre-OLT AFP >500.

Conclusion Recurrent HCC is uncommon for patients transplanted within Milan criteria. We were unable to demonstrate an effect of short waiting time or high AFP level pre-OLT on the likelihood of recurrent HCC.