

Liver biopsy does not change transplant candidacy decisions for HBsAg KT candidates

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Background/Aims: Hepatitis B virus (HBV) infection in kidney transplantation (KT) recipients is associated with increased overall mortality, graft loss, and progression of liver disease after KT. Liver biopsy is the gold standard for hepatic diagnosis, but it is an invasive and painful procedure. This study evaluated the necessity of liver biopsy in the decision concerning transplant candidacy among HBV-positive living-donor KT recipients. **Methods:** This single-center retrospective study reviewed 3,532 patients who underwent KT from February 1997 to March 2015. Outcomes were analyzed for 144 hepatitis B surface antigen (HBsAg)-positive patients with end-stage renal disease who underwent liver biopsy. To compare clinical characteristics, we divided the patients into two groups according to the degree of fibrosis based on METAVIR score. Pathologic findings without fibrosis (F0) were found in 65 (49.6%) cases, and 79 (50.4%) patients were included in the fibrosis group (fibrosis score F1 to F4). **Results:** Liver biopsy did not change the treatment plan including KT operation and anti-viral agents in our all 144 patients. Liver biopsy procedures in HBsAg positive recipients have decreased in our center. There was no liver failure after KT in non-fibrosis patients and 4 (5.1%) fibrosis patients progressed to liver failure ($p=0.127$). Hepatocellular carcinoma was diagnosed in 2 (3.1%) non-fibrosis patients and in 6 (7.6%) fibrosis patients ($p=0.294$). Biopsy confirmed acute rejection occurred in 12 (18.5%) non-fibrosis cases and in 22 (27.8%) fibrosis cases ($p=0.187$). The 5-year graft survival rate was 96.9% in non-fibrosis patients and 94.6 % in fibrosis patients. There was no significant differences in graft and patient survival between patients with or without fibrosis ($p=0.381$ and $p=0.113$ by log-rank test, respectively)(Figure 1). **Conclusions:** Liver biopsy might not be helpful when deciding treatment for HBsAg positive KT candidates.

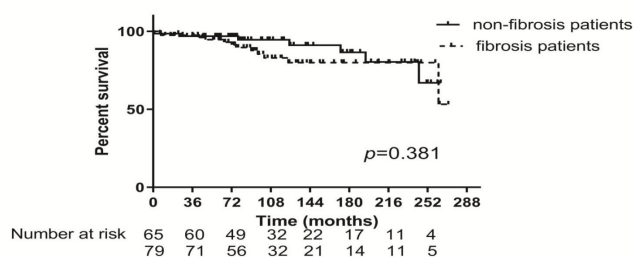


Figure 1. Kaplan-Meier curve of graft survival in of patients without fibrosis and patients with fibrosis