

## **LONG TERM OUTCOMES OF ENTECAVIR MONOTHERAPY AFTER LIVER TRANSPLANTATION FOR HEPATITIS B - 5 YEARS DATA**

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**BACKGROUND:** Previous study has shown that entecavir monotherapy is effective and safe to prevent hepatitis B (HBV) recurrence after liver transplantation (LT) but long-term data is lacking. The aim of the current study is to review the long-term results of entecavir monotherapy in HBV patients after LT.

**METHODS:** Patients who underwent LT for HBV related disease and received entecavir monoprophyllaxis in our centre from November 2007 to July 2009 were included. Primary outcome was HBV recurrence: 1) virological rebound as defined as  $\geq 1$  logIU/ml increase of HBV DNA and 2) HBsAg seropositivity. Secondary endpoint was assessment of degree of fibrosis/cirrhosis in liver graft using transient elastography (Fibroscan). Data on patients' demographic, liver function and HBV serology were retrieved from a prospectively collected database. Fibroscan was done by two operators and examinations were reliable if  $\geq 10$  valid measurements were acquired with success rate (number of valid acquisitions/ number of attempts)  $>60\%$ . Significant fibrosis and cirrhosis were defined as  $>8.1$  kPa and  $>11$  kPa respectively.

**RESULTS:** 65 patients with a median follow-up of 65 months were included. 9 (13.8%) of the patients died during study period. There was no mortality or graft failure due to HBV recurrence. At the end of 5th year, HBsAg seroclearance and complete HBV DNA suppression to undetectable level were 88% and 100% respectively. Two patients defaulted fibroscan. Overall success rate for fibroscan was 50/54 patients (92.6%). There were 4 failures due to thick chest wall and narrow intercostal space. The median liver stiffness of 5.9kPa (2.5-14.8kPa) and it was  $>11$  kPa in 3 patients.

**CONCLUSION:** Entecavir monoprophyllaxis is effective and safe as against HBV recurrence after LT and HBsAg seroclearance of 88% and complete HBV DNA suppression were achieved at 5 years. The clinical importance of HBsAg positivity in the absence of virological rebound remains uncertain.