Prognostic Utility of Transient Elastography In HIV-Infected Patients With Liver Cirrhosis

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INTRODUCTION

- Liver cirrhosis is an important cause of mortality in HIV-infected subjects.
- After the first hepatic decompensation survival decreases sharply.
- Early diagnosis of liver cirrhosis and optimal management is essential to decrease the risk of hepatic decompensation and to improve prognosis in HIV-infected subjects.
- Transient elastography (TE) has been incorporated to the routine management of HIV-infected subject with liver cirrhosis to measure liver stiffness (LS).
- TE beside the good performance for the diagnosis of liver cirrhosis is a sensitive test to detect changes in the liver damage and portal hypertension.
- It is not known if liver stiffness measurements could predict hepatic mortality in HIV infected subjects with chronic hepatitis.

OBJECTIVE

- To assess the performance of TE to predict hepatic decompensation and mortality in HIV cirrhosis subjects.

PATIENTS AND METHODS

- From the GESIDA prospective cohort of HIV-infected patients with confirmed liver cirrhosis at baseline with follow-up between 2004-2012 we selected all subjects who had a TE measurement at least 6 month before the last visit.
- Combined primary endpoint: death, hepatic decompensation or liver transplant.
- Episodes of hepatic decompensation at baseline and during follow-up were collected.

RESULTS

- 169 subjects had one TE measurement with at least 6 months of follow-up later in the cohort. Baseline characteristics are referred to the characteristics collected in the visit when TE measurement was performed (Table 1).
- The median of follow-up was 36 months. 19 primary outcomes and 21 hepatic decompensation occurred during follow-up (Table 2).
- Variables associated to combined endpoint were analyzed through univariate and multivariate analysis. Two different models of multivariate analysis were conducted including or excluding hepatic decompensation variable (table 3 and 4).
- TE measurement of 44 Kpa had the best diagnostic performance and was selected.
- Survival analysis showed significant differences in subjects with TE measurement higher than 44 Kpa and hepatic decompensation at baseline (figures 1 and 2).
- TE measurement performance for predicting clinical outcomes are shown in table 5.
- TE measurement for combined endpoint and death AUROC had a high performance (figure 3 and 4).

CONCLUSIONS

- LS measurement accurately predict survival, risk development of hepatocarcinoma and/or liver transplantation in HIV infected subjects with liver cirrhosis.
- LS measurement predict hepatic decompensation.
- LS measurement appears to be the best prognostic test for predicting ESLD events in HIV infected subjects with liver cirrhosis.

DISCUSSION

- Our study has some limitations:
  - Low number of clinical events
  - Follow-up not long enough
- These limitations might preclude showing a possible survival benefit for conected patients with liver cirrhosis who achieve SVR.
- Every effort should be made to identify progression of cirrhosis in HIV patients.

Discussion of the paper.