

IMPACT OF HCV ERADICATION FOLLOWING DIRECT ACTING ANTIVIRALS ON LIVER STIFFNESS MEASUREMENT; A PROSPECTIVE LONGITUDINAL STUDY

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Background

Hepatitis C virus (HCV) is a major global health challenge, especially in countries like Egypt. Sofosbuvir plus daclatasvir (Sof/Dac) is the most common regimen used in Egypt for HCV treatment. Assessment of fibrosis after HCV eradication is important, especially in patients with compensated advanced chronic liver disease (cACLD). The value of liver stiffness for this purpose is still debated.

Aim

The aim of the study was to evaluate the effect of HCV eradication defined as sustained virological response 24 weeks after the end of treatment (SVR 24) on liver stiffness measurement (LSM) using transient elastography, in HCV patients treated by Sof/Dac.

Patients and methods

103 Egyptian HCV patients who received Sof/Dac for three months and underwent LSM before and 24 weeks after the end of treatment were prospectively enrolled. Patients were classified into 3 groups according to LSM for the presence or absence of disease cACLD (Baveno). Group I: Patients with LSM <10 kPa without cACLD. Group II: patients with LSM 10-15 kPa with suspected cACLD and group III: patients with LSM >15 kPa with likely cACLD.

Results

All patients (100%) achieved SVR24 without significant side effects. A significant LSM decrease was observed at W24 compared to baseline in the 3 groups of patients: from 6.0 to 4.75 kPa ($p=0.0001$) in group I, from 12.6 to 11.9 kPa ($p=0.042$) in group II and from 28.3 to 24.0 kPa ($p=0.0001$)

Conclusion

Sofosbuvir / Daclatasvir combination is highly effective and well tolerated in Egyptian HCV patients. SVR-24 was associated with significant improvement of LSM in all groups of patients. We cannot rule out however the fact that LSM decrease is related to necro inflammatory improvement rather than to fibrosis improvement. A longer follow up of these patients with further assessment to detect the changes in liver stiffness is planned.