Impact of Eradication of HCV by Direct Acting Antiviral Medication on liver fibrosis using noninvasive techniques in chronic HCV infected patients

Thesis

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<u>Abstract</u>

Introduction: Direct acting antiviral agents(DAAs) had opened the gate for effective and real management of hepatitis C virus (HCV) with high sustained virological response (SVR) rates .The precise evaluation of hepatic fibrosis is crucial in the management of Chronic Hepatitis C (CHC). Multiple non invasive serological scores have been used in the accurate prediction of fibrosis.

Aim of work: To study the effect of DAAs on liver fibrosis in Egyptian patients with CHC infection &to evaluate if fibrosis process is reversible or not.

Subjects and methods:A cohort study was performed on one hundred Egyptian patients with CHC and treated with DAAs. FIB-4 & APRI scores were evaluated for all patients before treatment and at SVR to evaluate degree of fibrosis before and after treatment.

Results: The mean age of the studied population was $51.5 (\pm 12.1)$ years old. There is significant decrease in mean APRI & FIB-4 Scores after treatment (0.47&1.9 respectively) compared with (0.97&2.9 respectively) before treatment. This indicates fibrosis regression of about 32.8% and 51.6% using APRI & FIB-4 scores respectively. There is no significant difference in fibrosis regression between patients with different treatment regimens. There is significant increase in platelet (PLT) count and albumin level and significant decrease in liver enzymes (ALT and AST levels).

Conclusion: Eradication of HCV with DAAs results in significant improvement in liver fibrosis and liver function tests.

Key words: HCV;DAAs;liver fibrosis;APRI; FIB-4.