

# Evaluation of liver fibrosis after treating patients with chronic hepatitis C with direct acting antivirals

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## Introduction

After successful treatment of hepatitis C virus (HCV) infection with Direct-acting antivirals (DAAs) as a highly effective treatment, the stage of liver fibrosis decreases by time even in cirrhotic patient. We aimed to assess changes in liver fibrosis using transient elastography (TE) before and 1 year after DAA therapy in patients with HCV cirrhosis who came to hepatitis C clinic of Shariati hospital affiliated to Tehran University of Medical Sciences during 2016 to 2017.

## Methods

In this observational cohort all patients who had cirrhosis due to chronic HCV and were treated with sofosbuvir + daclatasvir (Sovodak, Rojan Pharma, Iran) who had achieved SVR and performed FibroScan before and after treatment were enrolled. Transient elastography was performed (FibroScan, Echosense, France) before treatment and one year after end of treatment. The primary outcome was change in TE one year after end of treatment relative to baseline. Two years follow up was completed.

## Results

Of the 363 patients who received treatment 172 patient have completed the protocol, (96%) patients achieved virologic response-12 (SVR-12). Of these patients, 143 performed FibroScan before and after treatment, 111 were males (77.6%), mean age was  $55.5.0 \pm 10.7$  years, and mean body mass index was  $26.5 \pm 4.8$  kg/m<sup>2</sup>. Mean baseline liver stiffness was  $29.63 \pm 14.73$  that was decreased to  $24.25 \pm 24.94$  kPa (p value=0.009) and Mean baseline liver steatosis was  $240.11 \pm 45.821$  that was decreased to  $241.63 \pm 52.75$  dB/m (P value:0.735).

363 treated with  
\*Sovodak

172 follow up  
was finished

153 SVR

143 Data  
completed

7 patients not respond to treatment  
 12 patients had Liver biopsy before treatment and not performed FibroScan  
 10 patients not performed FibroScan after treatment

## Conclusion

Successful HCV eradication in patient with liver fibrosis results in significant decline of liver stiffness.