REVERSAL OF FIBROSIS AFTER SUCCESSFUL HCV TREATMENT IN PEOPLE WHO INJECT DRUGS (PWID)

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Background:
Left untreated, 5-25% of individuals with chronic hepatitis C virus (HCV) will develop cirrhosis, liver decompensation, and hepatocellular carcinoma over time. People who inject drugs (PWID) may be at risk of more rapid progression because of the hepatotoxic nature of recreational drugs. All-oral therapies have made HCV easily curable, potentially mitigating risk for progressive liver disease. Transient elastography is a non-invasive means of measuring hepatic fibrosis, allowing us to evaluate the impact of treating HCV infection in a population with exposure to multiple hepatotoxic agents.

Methods:
We performed a retrospective chart review of all individuals with a current/former substance use, who have successfully been treated for HCV at our centre. Using Fibroscan (FS), we analyzed fibrosis levels at baseline (pre-treatment) in comparison with results at time of cure.

Results:
Between March 2014 and April 2018, we have identified 81 PWID, treated for their HCV, with both baseline and SVR12 FS scores available. 68%/59%/20% reported opioid/cocaine/amphetamine use, respectively. Overall mean baseline FS: 11.09 kPa ± 9.3, SVR12 FS: 7.2 kPa ± 6.2. ($p < 0.05$). Patients with baseline cirrhosis (n = 13, FS >12.5 kPa), mean baseline FS: 25.7 kPa ± 14.5, mean SVR12 FS: 15.6 kPa ± 11.05. HIV co-infected patients (n = 13), mean baseline FS: 11.5 kPa ± 6.6, mean SVR12 FS: 6.8 kPa ± 3.4. Patients with GT3 (n = 12), mean baseline FS: 11.5 ± 7.5, mean SVR12 FS: 8.1 kPa ± 6.5.

Conclusion:
Liver fibrosis was significantly impacted by achievement of HCV cure, even in the presence of ongoing drug use. Notable reductions were seen in individuals with baseline cirrhosis, HIV co-infection, and GT3. Policy should include prioritizing PWID to receive treatment, as they are at a particular higher risk of disease progression.

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