REGRESSION OF LIVER FIBROSIS AFTER SUCCESSFUL ALL ORAL ANTIVIRAL THERAPY IN HCV CIRRHOSIS: A PILOT STUDY EMPLOYING TRANSIENT ELASTOGRAPHY AND CONTROLLED ATTENUATION PARAMETER (CAP)

J. Rayes¹, G. Sebastiani²

¹. Internal medicine, McGill University, Saint-laurent, QC, Canada; ². Royal Victoria Hospital, McGill University Health Center, Montreal, QC, Canada

Background: Studies on the regression of liver fibrosis after SVR are limited. Until the advent of accurate non-invasive tests for fibrosis, paired biopsy studies were limited by patient compliance and small sampling biases. Early studies comparing non-oral regimens using mostly paired liver biopsies showed a 62% regression in liver fibrosis after achieving SVR. Only four studies at the time of this publication have used the non-invasive FibroScan to measure fibrosis regression. A meta-analysis of these 4 studies predicts an 82% regression in fibrosis. Most recently a well-designed prospective study by the ANRS CO13 HEPAVIH study group looked at fibrosis regression using the FibroScan in patients co-infected with HIV and HCV who achieved SVR via oral or non-oral antiviral agents. This study showed at least 30% fibrosis regression in 74% of all patients at 2 years.

The landscape of HCV management continues to rapidly evolve with the combined advent of new all oral antivirals and new noninvasive measurements of liver fibrosis with the FibroScan. In this context no study to date has directly looked at fibrosis regression using FibroScan in HCV patients receiving an all oral antiviral regimen.

Aims: Primary objective: To elucidate the dynamics of liver fibrosis regression in patients who achieve SVR with an oral only antiviral regiment.

Secondary objective: To identify negative predictors for fibrosis regression including HIV status, IV drug use, hepatic steatosis, cirrhosis and history of hepatic decompensation.

Methods: The Chronic Viral Illness Service (CVIS) is a university-based clinic which has served over 3000 HCV-infected patients in 24 months. The CVIS is part of the McGill University Health Centre (MUHC) network located in Montreal, Quebec. A computerized database has been prospectively maintained to include all patients who have undergone HCV treatment. This database will be combined with information obtained from the MUHC electronic medical records (Oacis system) to provide the researchers with the required data.

Results: Percentage reduction in fibrosis with 95% confidence intervals (all patients): 20.04 +/- 9.68 %.

Conclusions: There is a statistically significant reduction in liver fibrosis after treatment with DAAs. The study included only 18 patients; however, it still managed to achieve statistical significance. An extended database is under analysis to add more patients to the study and achieve better results.

Funding Agencies: None