

## **FATIGUE IN PATIENTS WITH CHRONIC HEPATITIS C: THE FAT-HEP STUDY. A CROSS SECTIONAL STUDY OF FATIGUE AND ITS RELATION TO SUBSTANCE USE AND OST**

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**Background:** Fatigue is a commonly described symptom in patients with chronic hepatitis C virus infection (CHC). The recent guidelines from European Association for Study of the Liver (EASL) suggest debilitating fatigue as a treatment indication. The pathophysiology behind fatigue in CHC patients is still to be determined, as well as consensus on what tools to use in measuring fatigue. It has been questioned whether fatigue is in fact caused by CHC or by other confounding factors such as substance use and opioid substitution therapy (OST) among patients in this population.

**Methods:** During 7 consecutive weeks fatigue was assessed in patients attending an outpatient clinic. A variety of tools were used including; Fatigue Severity Scale (FSS) and Functional Assessment of Chronic Illness Therapy-Fatigue (FACIT-F) and a fatigue VAS scale.

**Results:** 38/56 (67.9 %) of participants reported clinically significant fatigue (FSS score  $\geq 4$ ). 17/56 had current substance use, 30/56 had previous substance use and 20/56 was on OST. Fatigue was not associated with current or previous substance use or OST in either of the questionnaires ( $p > 0.05$ ). ALAT  $\geq 30/19$  and Transient Elastometry (TE)  $\geq 12$  kPa were significantly associated with FSS score  $\geq 4$  ( $p < 0.05$ ). Sustained virological response 12 weeks after treatment (SVR12) was associated with lower levels of fatigue in the Fatigue sub score of FACIT-F ( $p = 0.01$ ). Furthermore fatigue did not relate to age, gender, alcohol consumption or medication.

**Conclusions:** Study results suggest that fatigue is a prominent symptom in CHC. While fatigue showed no association with substance use or OST, it did associate with CHC related measures such as SVR12, ALAT and TE. This indicates that fatigue relates to liver fibrosis, infection and inflammation of the liver, and cannot be explained solely by confounding factors such as substance use, OST and alcohol consumption in the CHC population.

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