Usefulness and validation of SAF score in Egyptian patients with chronic HCV <u>Ahmed El Ray (1)</u> Valerie Paradis (2) Ahmed Montasser (1) Mohamed Shemis (1) Iris Nessim (1) Hoda Abu-Taleb (1) Tarik Asselah (2) Mohamed Ashiq (2) Nicolas Poté (2) Maha Akl (1), Maged ElGhannam (1)

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Background:

Egypt has the highest level of HCV prevalence in the world. Non alcoholic fatty liver disease (NAFLD) is highly prevalent all over the world including Egypt. SAF score has been developped to build a scoring system for histopathologic classification of fatty liver disease that covers the entire spectrum of lesions from NAFLD to non alcoholic steatohepatitis (NASH)

Aim

The aim is to study the usefulness and validation of SAF score in Egyptian patients with chronic HCV

Patients and methods:

We performed a prospective study including 70 Egyptian Patients with chronic HCV infection. Inclusion criteria were positive serum anti-HCV and positive HCV RNA. Patients were naïve (not subjected to interferon or DAA therapy) and routine laboratory testing were made. Patients were divided into two groups; patients with and without metabolic syndrome (MS). Detailed histopathologic evaluation of the liver biopsy had been done for assessment of steatosis, activity grade and stage of fibrosis, according to METAVIR and SAF systems.

Results :

- -The degree of fibrosis increases with the progress of age (P 0.0001).
- ALT and/or AST were found to increase crescendo from F1 to F3 (P 0.0001) but not AST/ALT ratio (p 0.454).
- -No significant correlation between SAF scoring and BMI (<30 and 30 or more); steatosis (P 0.273), Activity (P 0.102) and fibrosis (P 0.119).
- -No significant relation between SAF score fibrosis and MS (P 0.791).
- No significant correlation between SAF score and HCV viremia
- Multivariate linear regression analysis for SAF score associated with independent risk factors is as follows: BMI (P 0.276); MS (P 0.515); IR (p 0.420) and HCV-RNA-PCR (P 0.284).

Conclusion:

SAF could not differentiate between patients with chronic HCV with elevated transaminases due to NASH from those with elevated transaminases due to the activity of the chronic HCV. Steatosis is an independent precipitating factor for fibrosis.