

## HEPATITIS C

# #P18 - Impact of HCV cure in patients with systemic autoimmune diseases

L. ILIESCU<sup>1</sup>, T. ISAC<sup>1</sup>, R. SIMU<sup>1</sup>, A. POPESCU<sup>1</sup>, L. MICU<sup>1</sup>

(1) Fundeni Clinical Institute - Bucharest (Romania)

### Background & Aims

Hepatitis C virus (HCV) infection is associated with a state of systemic inflammation and HCV infected patients have an increased incidence of autoimmune diseases compared to the general population. This study aims to determine the impact of HCV cure (SVR- sustained virologic response) obtained by direct acting antivirals (DAA) in patients diagnosed with systemic autoimmune diseases.

### Methods

The study included 14 patients diagnosed with rheumatoid arthritis (RA), 8 patients with systemic lupus erythematosus (SLE) and 11 patients with Sjogren's Syndrome with detectable HCV viremia. We determined serum levels of C-reactive protein (CRP), interleukin-6 (IL-6), tumor necrosis factor -alpha (TNFa), as well as specific antibodies at the beginning of DAA therapy and at 3 months after the end of therapy (SVR).

### Results

The mean age in the study lot was 51.34+/- 14.59 years, the majority of patients were female (78.78%). Patients were maintained on stable doses of prednisone (39.4% of patients), methotrexate (48.5% of patients) and hydroxychloroquine (12.1% of patients) throughout DAA therapy. Initially 33% of patients (11/33) had an indication for biologic therapy due to progression of disease. Distribution of degrees of fibrosis was: 4 F0 patients, 9 F1 patients, 15 F2 patients and 5 F3 patients. At RVS, we noted a significant decrease in CRP (by 32%, p=0.03), IL-6 (by 21%, p= 0.04) and TNFa (by 38%, p=0.01). In Sjogren syndrome ANA titers decreased in 2/11 patients, in SLE antiDNA levels decreased in 4/8 patients and in PR patients rheumatoid factor decreased in 11/14 patients. Clinical benefits were noted in 9/14 PR patients (64.5%), 6/8 SLE patients (75%) and 7/11 Sjogren patients (63%). Out of 11 patients with an initial indication for biologic therapy, only 6 maintained the indication at SVR.

### Conclusions

HCV cure is associated with decreased systemic inflammation in patients with systemic autoimmune diseases. This translates into a better disease management and better clinical control, as well as a decreased need for incrementing disease-modifying therapies.