

## **EP-05 - (7) - TOTAL CHOLESTEROL AND LOW-DENSITY LIPOPROTEIN INCREASES AFTER TREATMENT WITH DIRECT-ACTING ANTIVIRAL AGENTS – IMPLICATIONS IN THE FUTURE?**

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BACKGROUND: Hepatitis C Virus (HCV) downregulates cholesterol levels. With the availability of new direct acting antiviral agents (DAA) this subject requires careful consideration. AIMS: TO evaluate the behaviour of metabolic risk factors of HCV infected patients before and after treatment, comparing the outcomes with the new DAAs versus PEG+RBV. METHODS: group 1: 105 patients (pts) treated with DAA included (2015-2016); group 2: 73 consecutive patients with HCV treated with PEG+RBV (2012 and 2013) were reviewed. All completed 1 year of follow up the beginning of the treatment and achieved SVR. Biochemical and clinical parameters were accessed before treatment and after 1 year of follow up. Statistical analysis by SPSS v23. RESULTS: group 1: 105 pts, 50.5% male, median age 53 years, 46% genotype 1b; group 2: 73 pts, 65.8% male, median age 42 years, 44% genotype 1b. There was a significant increase in total cholesterol in both groups (group 1:  $p<0.001$ , 95% CI: 0.41-0.78; group 2:  $p<0.001$ , 95% CI: 0.23-0.69). In group 1, triglyceride levels significantly decreased ( $p=0.015$ , 95% CI: -0.33-0.04) after treatment but in group 2 there was a significant increase in triglyceride levels ( $p=0.014$ , 95% CI: 0.07-0.59). In group 1, low-density lipoprotein cholesterol (LDL) levels significantly increased after treatment ( $p=0.029$ , 95% CI: 0.05-0.88) but there was no evidence of significant variation in group 2. No significant variation in HDL, glucose and serum iron levels in both groups. In group 1 ferritin serum levels significantly decreased ( $p<0.001$ , 95% CI: -138.3-74.4) but no significant variation was seen in group 2. CONCLUSIONS: elimination of HCV was associated with a significant increase in total cholesterol levels. LDL levels significantly increase after treatment with the new DAA and there is a reduction of triglyceride levels. The acute phase protein ferritin significantly decreased after treatment with DAA. These metabolic disorders require future evaluation.