METABOLIC CHANGES AFTER ERADICATION OF HEPATITIS C VIRUS CHRONIC INFECTION WITH DIRECT ACTING ANTIVIRALS

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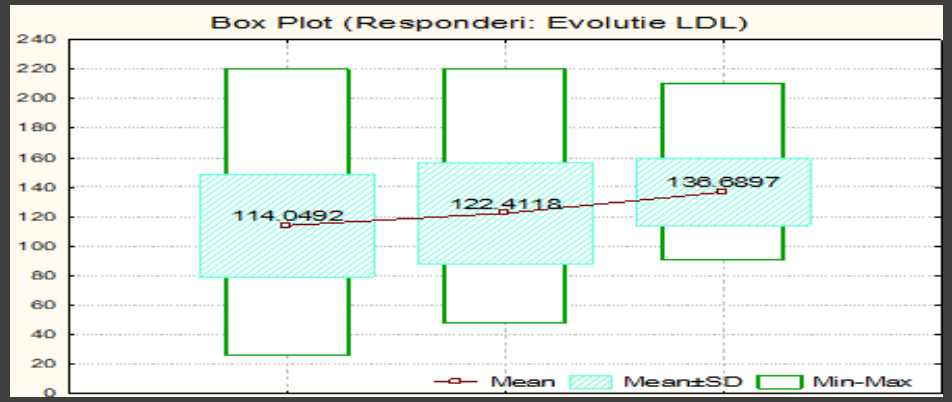
- **Background & Aim:** Chronic hepatitis C infection is a systemic disease that affects over 71 million patients all over the world and it is to be considered nowadays a new cardiometabolic risk factor due to its proatherogenic effects on the vascular endothelium and lipid profile alterations. The aim of this study was to evaluate the lipid profile changes before and after viral eradication in patients with hepatitis C virus (HCV) infection, considering that the virus chronicity is a potential additional cardiovascular risk.
- **Methods:** We conducted a prospective study between October 2015 to January 2020, in a tertiary center, in which we included 132 patients with chronic HCV hepatitis or cirrhosis. All patients received treatment with direct antivirals, respectively the therapeutic regimen (Ombitasvir / Paritaprevir / Ritonavir + Dasabuvir; Sofoabuvir / Ledipasvir ± Ribavirin). During the study we assesed biological data (blood count, TGP, TGO, serum albumin, urea, creatinine, total cholesterol (TC), LDL-cholesterol, HDL-cholesterol, triglycerides). The study group was followed at the initiation of antiviral treatment, after 3 months after the completion of antiviral treatment and within an average follow-up period of 6 months to 12 months after the previous evaluation.



LDL evolution Baseline SVR post SVR

- **Results**: Out of 132 patients, 128 have achieved sustained viral response (SVR). Patients that achieved SVR, registered an increase of the average of TC values (177.01 ± 42.2 mg / dl) compared to baseline. The differences had statistical significance between the initial values of the TC and those obtained at the time of SVR ($p < 0.05$) and post-SVR ($p = 0.049$) surveillance. The same trend in the increase of average values of LDL- cholesterol was observed at SVR and post SVR surveillance compared to the baseline (116.2 ± 35.6 mg / dL vs 124, 24 ± 34.9 mg / dL vs 136.72 ± 22.5 mg / dL). The post-SVR evaluation indicates an important variability of HDL values, being found lower values compared to the second surveillance moment in the study. Also, the serum level of triglycerides had been modified after viral clearance. At the time of the SVR assessment, there is a decrease in the mean values of triglycerides (128.4,8±41.8 mg / dL), followed by a minimal increase to the mean value of 135.4± 45.2 mg / dL in the third evaluations. The differences found between the initial values and those obtained at the time of SVR reached the threshold of statistical significance ($p = 0.008$, $p < 0.05$).
- **Conclusions:** Our study highlights that HCV eradication does not improve the lipid profile on the short term, and these patients still have an additional cardiovascular risk factor due to high levels of TC, LDL-cholesterol and triglycerides.

Triglycerides	N	Media	Media std. error	Standard deviation	Minimum	Maximum
Baseline	122	135.26	4.499	49.691	50	320
SVR	122	129.02	3.844	42.463	45	256
post SVR	122	135.34	6.901	45.773	42	266

Triglycerides median values at the screening moments