

# Ozone therapy in chronic viral hepatitis C in third age patients.

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ABSTRACT

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Chronic viral hepatitis C (HCV) is a global medical problem, its prevalence increases with age and involves high morbidity and mortality in the elderly population. The disease progresses slowly and is detected, accidentally, leading to devitalization of the body and it's difficult to treat. In most cases, hepatitis C leads to complications such as cirrhosis (20-25%), ascites, liver carcinoma (5%), hepatocellular failure.

The usual line of treatment is expensive, involves major side effects and low efficiency, high number of comorbidities, polypragmatism makes the difference for the elderly with the need to individualize treatment. Overlapping pathological changes with age-dependent ones determine the clinical picture with decreased physical activity and loss of functionality. The present study aimed to update HCV treatment regimens in the elderly by including ozone therapy, evaluating clinical, para clinical and functional efficacy.

## MATERIAL AND METHOD

The study included 85 HCV patients over the age of 65, randomly divided into two groups, the baseline and the control group, who signed the informed consent and underwent differential therapy.

The control group administered hepato-protective therapy, anti-fibrotic drugs, and vitamins. The basic group also administered ozone therapy in the form of intravenous infusions with Sol. NaCl 0.9% - 400 ml, daily, for 7 days, followed by major autohemotherapy with a concentration of 45-70 mcg / ml of ozone, intestinal insufflations with an ozone concentration of 15-25 mcg / ml, 3 times a week, 3 months, then twice a week, 3 months, associated with baseline therapy.

Both groups received inpatient treatment with assessment of health status before and after treatment, both clinically and para clinically, emotionally by the Hamilton depression score.

When comparing the indices of both groups, it is observed that the emotional status with the Hamiltonian geriatric depression scale shows differences between the subjects of both groups with significant improvement in the baseline group. When comparing the results of anamnestic and laboratory data, it is observed that 95% of patient cases in the baseline group improved compared to 76% in the control group. Furthermore, laboratory examination reveals a more significant reduction in cytolysis syndrome in the baseline group compared to the control

group with the post-treatment ALT level of 51.2 U / L compared to 65.0 U / L compared to 103.0 U / L and 107.2 U / L pretreatment ( $p < 0.01$ ), the AST post-treatment level of 52.2 U / L compared to 72.0U / L compared to 153.0 U / L and 167.2 U / L pre-treatment ( $<0.01$ ). The estimated viral load by PCR was reduced in 71.0% of patients in the baseline group compared to 65.2% of controls, with the negation of the viral load in 27.2% of the baseline group compared to 25.0% of controls after 10 weeks of treatment ( $p < 0.01$ ).

## **DISCUSSION**

The analysis of the results obtained in the patients of both groups showed a significant efficiency in the control of the presented symptomatology. Para clinically, here is a more pronounced improvement in the baseline with the reduction of cytolytic syndrome and viral load, increased quality of life and psycho-emotional status.

## **CONCLUSIONS**

Elderly patients with HCV have diminished functional capacity and a reduced quality of life. Correlational analysis of the parameters included in the research demonstrates the efficacy of ozone therapy in complex HCV therapy and contends it's widespread application.