

EFFECT OF OZONE GAE THERAPY AND RECTAL OZONE INSUFFLATIONS ON CHRONIC HEPATITIS C

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BACK GROUND: For over a century, scientists have recognized that ozone can inactivate many types of bacterial and viral pathogens. Some viruses are more susceptible to oxidation than others and lipid-enveloped viruses are the most sensitive to ozone. As a lipid-enveloped virus, HCV might be affected by ozone therapy.

AIM: To evaluate the role of ozone therapy in decreasing HCVRNA load and its effect on liver enzymes in patients with chronic hepatitis C.

METHODS: Between April 2009 and December 2012, two hundred and ten patients with hepatitis C genotype 1 were enrolled in this study. Diagnosis was clinched by positive polymerase chain reaction for HCV RNA and raised serum alanine transaminase (ALT) for more than 6 months. Patients were randomized before entering the study in three groups respectively: group A including 70 patients who received major autohemotherapy plus rectal insufflations three times per week for eight weeks, followed by two times per week for sixteen weeks; group B included 70 patients who received autohemotherapy and rectal insufflations plus standard antiviral therapy(PEG IFN alfa 2a 180 mcg/week plus ribavirina 1.5 mg/Kg/day); group C included 70 patients who received standard therapy only. Baseline characteristics (age, sex, BMI, hemoglobin, leucocytes, platelets, liver stiffness did not differ between the three groups.

RESULTS: Patients in group A had a significant decrease in HCVRNA levels(from 1.200.000 to 200.000 copies/ml after 6 months of treatment).None patient ,became HCVRNA negative. Seventy-five percent of patients in group B and 48% of patients in group C experienced a sustained viral response.

CONCLUSIONS: Ozone alone was able to decrease viral load, but was unable to eliminate it. When coupled with traditional management, ozone therapy increases the sustained viral response (78% vs 48% of patients; $p < 0.001$). In this study ozone therapy was found to be an effective, safe and inexpensive to treat hepatitis C patients.