Ozone therapy in the optic nerve dysfunction

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Abstract

One of the most frequent causes of blindness around the world is optic nerve dysfunction (OND) or optic atrophy. The main object of this preliminary study is to evaluate the feasibility to improve the visual function of a group of patients, with different degrees of OND with reduced possibilities of vision improvement, by means of ozone therapy. To 40 patients, 67 eyes, suffering from OND of different etiologies and time of evolution, were applied the mixture ozone/oxygen endovenously by autohemotherapy, during 15 sessions. Ozone concentrations and doses are used according to the biochemical status of each patient. An ophthalmological examination and a set of tests conformed by visual acuity (VA), visual field by Goldman Perimetry (VF), visual evoked potentials (VEP), Pelli Robson Contrast Sensitivity Test (PRCST) was applied to patients before and after ozone therapy treatment. PRCST and VF were the parameters mostly improved in patients with 87.5 % and 82.7 % respectively, followed by VA (54.5 %) and VEP (37 %). Good results were achieved in all etiologies studied, except Leber optic atrophy, where no improvement was observed, neither objective nor subjective.