

## 41. OZONETHERAPY IN NEUROLOGY

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**Introduction.** In the medical field we often intertwine with a variety of new methods and therapies which are directed into helping and treating patient's problems. One of the methods that proved its usefulness for more than a century now is Ozonotherapy. With an abundance of positive effects, such as: vasodilation, anti-aggregation, tissue oxygenation, anti-inflammation and, at times needed, immunostimulation, ozonotherapy tends to improve and to smooth the path in treating a multitude of diseases that occur especially in neurological patients. In this research we have a propensity in proving ozonotherapy's efficacy in neurology.

**Aim of study.** As the background for the research we were prone to discuss the usage of ozonotherapy in neurology, a topic that consists of a diversity of known diseases, such as: dyscirculatory encephalopathy, vegetative dystonia, chronic fatigue syndrome, migraine, ischemia, disseminated sclerosis. We tended to highlight the effects that ozone has on patients suffering from those neurological disruptions.

**Methods and materials.** In order to achieve the stated objective, the initial search of the specialized scientific literature, identified by the search engine Google Search, medical books and from the databases PubMed, NihGov was performed. The publications were selected according to the following keywords: „ozonotherapy”, „vegetative dystonia”, „disseminated sclerosis”, „encephalopathy”. After processing the information in the databases, we selected all publications starting with January-June 2011.

**Results.** With the help of various cohort studies, we concluded that using ozonotherapy in neurological disturbances such as: dyscirculatory encephalopathy, ischemia, the ozone decreased the level of atherosclerotic plaques and thrombi that were obstructing the arteries, thus leading to a better oxygenation of the cerebral parenchyma and a better cognitive function of the brain. Moreover in some cases, referring to: vegetative dystonia and chronic fatigue system, a therapy course with ozone (major autohemotherapy) optimized the functionality of the limbic-reticular complex, hypophyseal hypothalamic axis and had an optimizing effect on the symptomatic clinic because it had vegeto-modulatory effects on the vegetative nervous system.

**Conclusion.** The use of ozone in minimal and controlled amounts can bring major benefits to the human body with procedures such as: major and minor autohemotherapy, abdominal insufflation with ozone and perfusions with ozone-treated physiological substance, that can be widely used in treating diseases and ailments affecting the nervous system. Furthermore the presence of ozone therapy is a daring, yet holistic approach to pathologies present in nowadays' medical practice, a method which can elevate homeostasis by facilitating tissue's oxygenation process, improving blood's rheology and reducing the aforementioned neurological sequelae. Thus we wanted to provide and elevate ozonotherapy's effectiveness in diminishing and treating patients who suffer from neurological diseases, lessening the symptoms and upraising their recovery.