Ozone therapy in 40 patients with fibromyalgia: an effective therapy  

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Abstract

Fibromyalgia is a chronic disorder with a very complex symptomatology. There is evidence that oxidative stress is increased in fibromyalgia, although it is not known whether this increase is involved as a causative factor in the development of the disease, or whether it is secondary to the patients’ unfit condition. Ozone therapy is thought to act by exerting a mild, transient, and controlled oxidative stress that promotes an up regulation of the antioxidant system and a modulation of the immune system. The objective of the present study was to get a preliminary evaluation of the potential effectiveness of ozone therapy in the management of fibromyalgia. At our knowledge, this is the largest study of patients with fibromyalgia treated with ozone therapy reported in the literature and it demonstrates that the ozone therapy is an effective treatment for fibromyalgia patients without significant side effects.

Introduction

Fibromyalgia is a chronic disorder with a very complex symptomatology. Although generalized pain is considered to be the cardinal symptom of the disease, many other associated symptoms, especially non restorative sleep, chronic fatigue, anxiety, and depressive symptoms also play a relevant role in the degree of disability characteristic of the disease. Fibromyalgia pathogenesis is also complex, and both genetic and environmental factors seem to play a role in the patho-physiology of the disease. There is evidence that oxidative stress is increased in fibromyalgia, although it is not known whether this increase is involved as a causative factor in the development of the disease, or whether it is secondary to the patients’ unfit condition. Ozone therapy, is thought to act by exerting a mild, transient, and controlled oxidative stress that promotes an up regulation of the antioxidant system and a modulation of the immune system. According to these mechanisms of action, it was hypothesized that ozone therapy could be useful in fibromyalgia management. The objective of the present study was to get a preliminary evaluation of the potential effectiveness of ozone therapy as add-on treatment in the management of fibromyalgia.

Materials and Methods

Forty patients with fibromyalgia, according to the definition of the American College of Rheumatology, were treated at the MEDE Clinic, Sacile (PN), Italy, from February 2016 to December 2017. Females were 35 and males were 5; age ranged from 22 to 68 years, and the time from fibromyalgia diagnosis ranged from 0.5 to 33 years. The evaluation of pain was made by the Numeric Rating Scale, in which the patients chooses from 0 (no pain) to 10 (maximum pain) and the evaluation of the fatigue was made by the Fatigue Severity Scale, which is used to estimate the severity of the symptom with a score from 1 to 7. Treatment was made by auto hemo transfusion in 30 patients and by ozone rectal insufflation in 10 patients, according to the Scientific Society for Oxygen-Ozone Therapy (SIOOT) protocols, twice a week for one month and then twice a month as maintenance therapy.

Results

We found a significative improvement (>50% of symptoms) in 32 patients (80%). No patient reported important side effects. In conclusion, at our knowledge, this is the largest study of patients with fibromyalgia treated with ozone therapy reported in the literature and it demonstrates that the ozone therapy is an effective treatment for fibromyalgia patients without significant side effects.

Discussion and Conclusions

Ozone therapy, which is used to treat a wide range of diseases and seems to be particularly useful in the treatment of many chronic diseases, is thought to act by exerting a mild, transient,
and controlled oxidative stress that promotes an up-regulation of the antioxidant system and a modulation of the immune system. According to these mechanisms of action, it was hypothesized that ozone therapy could be useful in fibromyalgia management, where the employed therapies are very often ineffective.

The objective of the present study was to get a preliminary evaluation of the potential effectiveness of ozone therapy in the management of fibromyalgia. In conclusion, at our knowledge, this is the largest study of patients with fibromyalgia treated with ozone therapy reported in the literature and it demonstrates that the ozone therapy is an effective treatment for fibromyalgia patients without significant side effects.

References