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Hyperbaric oxygen treatment of fibromyalgia: a prospective observational clinical study

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Abstract

Objectives: Fibromyalgia (FM) is a syndrome of unknown aetiology that is characterised by widespread musculoskeletal pain, fatigue and disordered sleep, and often associated with neuropsychiatric and cognitive symptoms. Current treatment options are only partially effective, but hyperbaric oxygen therapy (HBOT) seems to be capable of relieving some of the symptoms. The aim of this study was to evaluate the efficacy and safety of HBOT after fewer sessions than generally used, chosen on the basis of pre-clinical and clinical data showing its rapid and sustained antinociceptive effect.

Methods: Patients with FM underwent HBOT (100% oxygen at 2.5 ata with air breaks) administered on three days per week for a total of twenty 90-minute sessions. Pain, fatigue, the quality of sleep, symptoms of anxiety and depression, and the patients' health-related quality of life were prospectively assessed before and after ten and twenty sessions.

Results: Twenty-eight of the 32 study patients completed the 20 HBOT sessions. Pain scores and the symptoms of anxiety (but not those of depression) significantly improved after both 10 and 20 sessions, whereas fatigue and FM symptom severity scores significantly improved only after 20 sessions. There was no significant change in the quality of sleep. The adverse effects were limited.

Conclusions: These findings support the view that HBOT is an effective, rapid and safe means of treating various symptoms of FM.