



Multiple Sclerosis

Multiple Sclerosis, or MS, is a degenerative disease that attacks the body's nervous system. The nervous system includes the brain, spinal cord, and various nerves that branch from them; MS attacks the brain and spinal cord. Nerves have protective sheaths of tissue called myelin. In patients diagnosed with MS, the myelin sheaths are destroyed, and the nerves become exposed and damaged. These sites of nerve damage are wounds, internal wounds, no different from wounds on the outside of our bodies. All wounds proceed through healing stages that result in some degree of sclerosis or scarring. Multiple Sclerosis (Scars). These scars or wounds can lead to a variety of symptoms depending on the area that is damaged and the severity of the degeneration.

There is no identifiable cause of Multiple Sclerosis, yet millions of people around the world have been diagnosed. No two people have the same experience with MS, but the progression of symptoms can be either a slow progressive neurological decline (Chronic Progressive MS) or periods of severe decline followed by months and even years of remission (Relapsing/Remitting MS). These periods of increased symptoms in Relapsing/Remitting MS are also known as flare-ups or relapses. MS relapses can last from a few days up to several months. These can be difficult to treat, and flare-ups can often result in permanent symptoms over time.

What are the effects?

The symptoms of MS vary greatly, but most often patients report difficulty walking, vision impairment, fatigue, numbness and tingling, weakness, bladder dysfunction, and pain. Secondary dysfunction can also arise as a result of these symptoms. The impact of Multiple Sclerosis on patients and their families is significant, and many people find themselves with long-term disability and difficulty managing symptoms.

Benefits from HBOT

Hyperbaric oxygen therapy is known to be a treatment of wounds in any location and of any duration. Hyperbaric oxygen therapy treats the wounds of MS. Hyperbaric oxygen treatment of MS has been proven to reduce symptoms in patients, stabilize their function long-term, and even increase overall health and wellness.

The benefits of HBOT for people with multiple sclerosis have been particularly encouraging in mild cases, but those with severe symptoms have also seen positive results. Many patients experience increased mobility and energy along with reduced urinary incontinence, involuntary movements, and fatigue. Over 60 centers in the United Kingdom have been successfully treating MS patients for decades.

Hyperbaric oxygen chamber Research on HBOT of multiple sclerosis is limited, but the most rigorous study on HBOT in relapsing/remitting MS, a randomized controlled trial by Dr. Fischer, was published in 1983 in one of the world's finest medical journals. The study demonstrated significant improvement in the MS patients treated with HBOT. In addition, a 14 year-long study in England showed stabilization and even improvement of MS patients treated intermittently over these 14 years.

The experience in our clinic has duplicated the published results in these studies. Based on the results of the 14-year study it is apparent that hyperbaric oxygen treatment for people with MS is best used in prevention of symptoms. Long-term benefits of HBOT for multiple sclerosis are very promising and can slow the spread of neurological damage as well as reduction of physical symptoms.

More and more patients are beginning to experience the long-term effects of hyperbaric oxygen treatments and therapy as it becomes more accessible. Stabilizing patients and preventing the progression of symptoms is an exciting and hopeful step in treatments for Multiple Sclerosis.

Further Research

<https://www.ncbi.nlm.nih.gov/pubmed/26709672>

<https://www.nejm.org/doi/full/10.1056/NEJM198301273080402> (The famous Fischer study, the most rigorous of all studies performed on HBOT in MS. Strongly positive results).

P.B. James, Oxygen Treatment for Multiple Sclerosis Patients, Chapter 22, Textbook of Hyperbaric Medicine, Sixth Edition, Editor: K.K. Jain, Springer Publisher, Cham, Switzerland, 2017. (can purchase individual chapters at: <https://www.springer.com/us/book/9783319471389#>)