

## **Multiple Sclerosis**

### **Multiple sclerosis, an autoimmune inflammatory disease: prospects for its integrative management.**

Kidd PM.

Contributing Editor, *Alternative Medicine Review*; Correspondence address: 847 Elm St, El Cerrito, CA 94530.

Multiple sclerosis (MS) is aptly named for the many scars it produces in the brain and spinal cord. A sometimes fatal, often debilitating disease, MS features autoimmune inflammatory attack against the myelin insulation of neurons. Thymus derived (T) cells sensitized against myelin self-antigens secrete tumor necrosis factor, cytokines, prostaglandins, and other inflammatory mediators that strip away the myelin and sometimes destroy the axons. Familial and twin inheritance studies indicate MS is mildly heritable. No single MS locus has been identified, but an HLA haplotype has been implicated. Unique geographic distribution of the disease is best attributed to some combination of vitamin D abnormality and dietary patterns. No pharmaceutical or other therapies exist that confer prolonged remission on MS, and obvious interrelationships between toxic, infectious, and dietary factors make a persuasive case for integrative management. The time-proven MS diet meticulously keeps saturated fats low, includes three fish meals per week, and eliminates allergenic foods. Dietary supplementation for MS minimally requires potent vitamin supplementation, along with the thiol antioxidants, the anti-inflammatory omega-3 fatty acids, and adaptogenic phytonutrients. Gut malabsorption and dysbiosis can be corrected using digestive enzymes and probiotics. Long-term hyperbaric oxygen therapy can slow or remit the disease. Transdermal histamine offers promise, and adenosine monophosphate may sometimes benefit. Chronic viruses and other infectious load must be aggressively treated and exercise should maintain muscle tone and balance. Early intervention with integrative modalities has the potential to make MS a truly manageable disease.

### **40 cases of multiple sclerosis treated with hyperbaric oxygen therapy**

Zannini D, Formai C, Bogetti B, Sereni G.

40 patients affected by Multiple Sclerosis, all in a worsening phase, have been treated with cycles of HBO since 1979. The therapy consists of a first cycle of daily treatment (5 in a week) for a total of 10-15 sessions (90' at 2 ATA) and subsequently, according to the case, 3-5 sessions every 1-2 months, or 1 monthly treatment. Six cases did not show improvements; among these, 4 have received adequate treatment, but in 5 cases the clinical picture do not worsen. The resting 34 cases (85%) had remarkable improvements, complete or near total recovery of one or more symptoms after the first cycle or the following treatments. Improvements or recovery of symptoms can be temporary or permanent along the period of observation (from 3 to 33 months). In 8 subjects the improvement were progressive after successive cycles. Cerebellar, sensorial, and sphincterial symptoms are the most susceptible of positive changes. Walking improvements, hand use normalisation and a better bladder control have allowed many patients a very satisfactory recovery of autonomy.

### **Slowly reversible central scotoma: iatrogenic effect of hyperbaric oxygenation in the treatment of multiple sclerosis**

Lambrou GN, Kopferschmitt J, Jaeger A, Brini A.

Considerable enthusiasm has been raised in the past about the use of Hyperbaric Oxygen (HBO) in various diseases, usually otherwise untreatable. Recently, special attention has been drawn on its hypothetical beneficial effects on multiple sclerosis (MS). We have witnessed a rare, though known, side-effect of HBO on a patient suffering from MS. She developed an acute, bilateral, centro-caecal scotoma, from which she slowly recovered several days after. The forementioned case led us to a review of the literature concerning: Various attempts to employ HBO in ophthalmology Side-effects of oxygen on eye and vision Possible mechanisms of ocular

toxicity of oxygen. It appears from this review that we should be extremely cautious about using HBO on MS patients, particularly able to develop such side-effects.

**Preliminary reports on hyperbaric oxygen therapy in multiple sclerosis.**

Ulewicz K, Dolmierski R, Maslowski J, Michniewski P, Kierznikowicz B, Wislocka I, Sicko Z, Olszanski R.

Bull Inst Marit Trop Med Gdynia. 1988;39(3-4):197-204.

Institute of Maritime and Tropical Medicine, Gdynia.

Preliminary clinical examinations comprised 16 patients suffering from multiple sclerosis, the mean duration of the disease 9.33 years, of the manifestations at different stages of the development--evaluated on the basis of Kurtzke scale. The patients were subjected exclusively to the treatment with oxygen hyperbary--all in all 25-30 exposures, with the intervals of 24 hours, under the O<sub>2</sub> pressure of 2 ata. The qualification for the purposes of treatment and the classification of the symptoms present were carried out according to Fisher, the results obtained were evaluated in conformity with standard version of the Disability Status Scale of Kurtzke. Apart from the routine clinical and laboratory tests the programme of the examinations included also a quantitative determination of immunoglobulins level, complement activity as well as the determination of T and B lymphocytes. An eminent change for the better was found in 14 afflicted persons, in one patient after 15 exposures a worsening was observed and the treatment was arrested. As to the immunological parameters investigated, a general decrease of IgG, IgM, IgA in serum, increase of the complement fraction and its 50% hemolysis determined activity were observed, whereas quantitatively investigated T and B lymphocytes did not show any typical changes. The authors discuss the results.