Matters arising

We hope that our papers have adopted a balanced rather than a negative view of the practical role of hyperbaric oxygen for patients with chronic multiple sclerosis.

References


Neubauer writes:

Sir: I must disagree with the final conclusions of Dr Barnes et al1 in regard to the effectiveness of hyperbaric oxygen in multiple sclerosis. My points of contention are: (1) Side effects: their series represented some of the highest incidence of side effects that have ever been reported in the hyperbaric literature. None of these occurred in their control series because the patients were not pressurised equivalently with air. They have drawn conclusions from their own problems that hyperbaric oxygen is fraught with side effects. Little do they realise that the majority of all hyperbaric oxygen pressurisations throughout the world are given in a lay setting on oil rigs with no physician in the chain. In a well run hyperbaric centre, even the slightest side effects of barotrauma are seen only in 1-2% of the cases. The extensive ARMS series in the United Kingdom reports only minimal discomfort. (2) The expense of the treatment: the ARMS charity institution in the United Kingdom again attests to both safety and cost effectiveness of this treatment. There are currently 56 ARMS centres where several thousand patients are undergoing treatment. These treatments are performed by trained lay persons. If the patient cannot afford the treatment, it is not withheld. It is my understanding that the treatment now runs about £6 (approx. $10.50), per treatment; this being the lowest fee for HBO in the world. (3) Lack of effect: in spite of possibly preconceived ideas, their data do show significance in regard to the urinary tract improvement. Such data have been previously documented.2-4 To a multiple sclerosis patient this is of extreme importance. These authors may have had significantly different results if only they had followed the original clinical protocol which stipulated individual pressurisation (dose) and continued treatment with HBO.5

Hyperbaric oxygen to the multiple sclerosis patient is analogous to insulin in the diabetic because of the dependence of the level of vasoconstriction on the inspired partial pressure of oxygen. How one would expect 20 treatments of any modality to permanently affect the continuing lesions is not reasonable. In my original publication, it was stressed that no patient had ever been cured, but hyperbaric oxygen does alter the course of multiple sclerosis. It must be used at the proper time and at the proper dose and continued treatments are mandatory. It is unfortunate that Dr Barnes et al used inappropriate pressure, had multiple side effects, and neglected their own data.6 Obviously they are proficient neurologists, but they are not involved in the practice of hyperbaric oxygen therapy.

Data continue to unfold confirming my original reports. Previous substantiated effects on the bladder, Barnes et al’s lack of cerebellar deterioration and the long term positive double-blind studies by Pirovano et al6 certainly belie their negative conclusions.

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References


Book reviews


The first edition of Michael Aminoff’s textbook of electromyography has now been expanded and in some sections rewritten to take account of the advances in the subject that have occurred over the last ten years. The resulting second edition, however, keeps faith with the author’s original aims to review the manner in which electromyography may be of value in the investigation of patients and to make clinicians more aware of the scope and limitations of the investigative procedures.

Not surprisingly then, the strength of the book lies in its discussions of the clinical relevance or otherwise of the neurophysiological findings. For example, there is an excellent chapter on the investigation of root and plexus lesions—the bête noire of neurophysiology. The pros and cons of needle examinations, motor and sensory nerve conduction studies, H-reflex and F-wave studies, somatosensory evoked potentials and dermatomal evoked poten-