

THE USE OF HYPERBARIC OXYGEN IN THE TREATMENT OF NEUROLOGICAL DISEASE

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In various medical centers experiences with high-pressure oxygenations as a basic treatment as well as part of a combination of multi-componential therapies are used. Results of traumatic and anoxic acute brain injuries of different origin in varying degrees of severity have been published in increasing number. HBO therapy has yielded encouraging results in rehabilitation Cerebral Palsy (CP) and other chronic neurological diseases.

In acute neurological conditions like traumatic brain injury, ischemic thrombotic stroke other vascular damages and anoxic encephalopathies hyperbaric oxygen exerts positive effects. It reduces cerebral edema, limits the ischemic cascade and delivers free molecular oxygen directly to the cells for immediate metabolic use without energy exchange even with compromised circulation. In many instances the ischemic penumbra is reduced or restored. In chronic brain damage such as CP, long term TBI or stroke, it is believed to reactivate dormant idling neurons and enhance plasticity, restores the integrity of the blood brain barrier and influences dendrite system building up a new effective network.

Till now no consensus paper exists for the indication for therapy of HBO in neurological conditions. The Special Interest Group of the EFNS on Space and Underwater Neurology, subdivision HBO is producing in a consensus paper for the indication HBO treatment in neurology control studies based on exact neurological examinations, EEG, SPECT (pre and post treatments) controls, incorporated centers in Antwerp, Moscow, Vienna, the U.S.A., Canada and in Mexico.

Friday, January 30, 2004

09.00-11.30 Lectures

Chairpersons: F. Gerstenbrand - L. Fekas

09.00-09.30 'Alois Alzheimer-His Life and work'
K. Maurer (Germany)

09.30-10.00 'Lysosomal Disorders and Cognitive Dysfunction'
H. Goebel (Germany)

10.00-10.15 Discussion

Chairpersons: A. Korczyn - R. Ihl

10.15-10.45 'The use of Hyperbaric Oxygen in the treatment of neurological
disease'
F. Gerstenbrand (Austria)

10.45-11.15 'The Psychological Testing in the Diagnosis in Dementia'
R. Ihl

11.15-11.30 Discussion

12.00-13.30 Lectures

Chairpersons: A. Arnaoutoglou - V. Costa

12.00-12.15 'The contribution of Neuroimaging to the improvement of the
Quality of life of patients suffering from Epilepsy'
N. D. Vlaikidis (Greece)

12.15-12.30 'Rehabilitation Philosophy in the management of multiple
Sclerosis-Improving the Quality of Life in MS
E. S. Koutsouraki, S. J. Baloyannis (Greece)



HELLENIC SOCIETY FOR
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OF THE QUALITY OF LIFE
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**2nd International Congress on the
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