

An Evidence-Based Review of the Neurological Applications of Hyperbaric Oxygen Therapy. Part 1

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ABSTRACT: The use of hyperbaric oxygen (HBO) has become widespread, especially for patients with complications of scuba diving and poorly healing wounds. However, HBO is also under consideration for many neurological diseases, including stroke, decompression sickness (DCS), multiple sclerosis, intracranial abscess, arterial gas embolism (AGE), and cranial trauma. In Part 1 of this report, the neurological pathophysiology of HBO will be reviewed, along with an evidence-based discussion of the application of HBO to each of these neurological diseases.. Currently, HBO is approved for use in cases of AGE, DCS, and intracranial abscess. In Part 2, there will be an evidence-based review of the use of HBO for less common neurological diseases; including spinal cord trauma, cerebral palsy, skull osteomyelitis, and wound healing after craniotomy, headache syndromes, malignant brain tumors, idiopathic sudden hearing loss, and pain syndromes.

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