Interview with Dr. Paul Harch: the application of hyperbaric oxygen therapy in chronic neurological conditions

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Abstract

Introduction: Hyperbaric oxygen therapy (HBOT) remains a controversial and misunderstood therapy, especially when applied to chronic neurological conditions and autism. This interview explores the science behind these applications. Methods: HBOT is defined as a pharmaceutical and its pharmacologic effects are reviewed in the context of the author’s historical application of HBOT to neurology, including autism. Results: HBOT has a powerful drug effect in acute brain injury through inhibition of the acute inflammatory reaction of reperfusion injury (the injury caused by return of blood flow after blood flow interruption—e.g. cardiac arrest at birth, near-drowning, etc.) The author’s successful use of HBOT in divers with delayed treatment of brain decompression sickness led to the application to other types of chronic brain injury, including autism. HBOT is suggested to have common pharmaceutical actions on the pathology of chronic brain injury, including autism, that are reinforced by the author’s proof of effectiveness in an animal model of chronic traumatic brain injury. Some of the author’s 25 autistic patients seem to have significant birth insults that contributed to the diagnosis of autism. HBOT appears to be effective for these insults years later. Other physicians are now duplicating the author’s findings in autism. There appears to be no identifiable body of information on HBOT in combination with chelation therapy. Conclusions: HBOT appears to be effective in the treatment of autism. The pathological targets of treatment are unknown at this time.

Keywords: HBOT (hyperbaric oxygen therapy), autism, pharmaceutical, chronic brain injury, chelation therapy