Title: Neuropsychological Effects Of Hyperbaric Oxygen Therapy In Cerebral Palsy.

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Test Groups:	Active Treatment Group- 100% Oxygen at 1.75 ATA Sham Treatment Group- Ambient Air at 1.3 ATA
Test Subjects:	75 children diagnosed with CP aged 4 to 12 years
Conclusion:	No statistical difference was found between the two treatments. The sham group improved significantly on eight dimensions of the Conners' Parent Rating Scale, whereas the active treatment group improved only on one dimension.

Abstract: We conducted a double-blind placebo study to investigate the claim that hyperbaric oxygen treatment (HBO^sub 2^) improves the cognitive status of children with cerebral palsy (CP). Of 111 children diagnosed with CP (aged 4 to 12 years), only 75 were suitable for neuropsychological testing, assessing attention, working memory, processing speed, and psychosocial functioning. The children received 40 sessions of HBO^sub 2^ or sham treatment over a 2-month period. Children in the active treatment group were exposed for 1 hour to 100% oxygen at 1.75 atmospheres absolute (ATA), whereas those in the sham group received only air at 1.3 ATA. Children in both groups showed better self-control and significant improvements in auditory attention and visual working memory compared with the baseline. However, no statistical difference was found between the two treatments. Furthermore, the sham group improved significantly on eight dimensions of the Conners' Parent Rating Scale, whereas the active treatment group improved only on one dimension. Most of these positive changes persisted for 3 months. No improvements were observed in either group for verbal span, visual attention, or processing speed.

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