

New hope for autism and cerebral palsy

Autism and cerebral palsy affect millions of children all around the world.

According to HANS website, autism, a complex developmental disability, is typically diagnosed in the first three years of life. Developmentally, these children are often fine until around 18 to 24 months, when there is a sudden, alarming regression. They may stop speaking. They may avoid eye contact, have impaired social interactions, display repetitive and unusual movements, and noticeably limit activities and interests.

Cerebral palsy describes a group of disorders that affect body movement and muscle coordination. Any damage to the developing brain of a child can cause cerebral palsy. It may result in muscle tightness, muscle spasm, difficulty with gross motor skills (such as running or walking), damaged fine motor skills (such as writing or buttoning), and abnormalities in sensation or perception. Depending on the severity, these symptoms range from mild to severe.

Autism and cerebral palsy affect millions of children, often resulting in severe disabilities in behaviour, cognition and motor movements. Promising research now shows that hyperbaric oxygen therapy is effective for these conditions.

Not a new therapy

As we can read on the website, hyperbaric oxygen (HBO) therapy is a safe therapy overlooked by many physicians because historically, it has not been used for brain injuries. It is not a new therapy, but has recently gained attention for its ability to repair and regenerate injured brain cells. Clinical studies on HBO therapy in relation to autism and cerebral palsy are limited; however, reports from healthcare practitioners and families are very encouraging.

The air we normally breathe at sea level is approximately 20 percent oxygen, and the pressure at sea level is defined as one atmosphere absolute. With HBO therapy, the pressure inside the chamber is increased to above one atmosphere absolute, and the patient breathes 100 percent, pure oxygen through a mask or hood. Breathing pure oxygen under pressure dissolves the oxygen in to the fluid compartments of the body including the blood, lymph, plasma, and the fluid surrounding the brain and spinal cord (cerebrospinal fluid).

Studies

In a 2006 study from the University of Virginia, 18 autistic children underwent 40 one-hour sessions of HBO therapy. Researchers observed significant improvements in energy, communication, motivation, mannerism, speech, sensory and cognitive awareness and overall health in the autistic participants.

A landmark study, published in the October 2006 issue of Family Practice News, involved participants with chronic brain injury, the majority of whom had cerebral palsy with an average age of 4.5 years. Daily living, socialization, communication and motor skills significantly improved in the 21 children who received HBO therapy compared to 21 children who received standard therapy alone.

A Cornell University study involved 26 children with cerebral palsy who underwent 40 one-hour sessions of HBO therapy. Results showed substantial improvements in motor skills, attention, language and play.

“Waking up” brain cells

One possible explanation of the benefits of HBO therapy may be its ability to increase blood flow to the brain, thereby providing more oxygen and nutrients. Viable brain cells “wake up” with this increase in blood flow, enhancing brain functioning and improving symptoms. HBO therapy may also help in several other ways, including reduced inflammation, reduced oxidative stress, increased metabolism of cells, and mobilized stem cells from bone marrow.

Dr. Tasreen Alibhai states that in their clinic they have even been able to “slowly wean children off drugs such as Ritalin and Prozac” with the help of HBOT. Read her other experiences by following the link below:

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Alibhai, Tasreen. [Hyperbaric Oxygen Therapy for the treatment of Autism](#). Published online via Canadian Hyperbaric Institute.