

# **Child Neurology**

# **Proven therapeutic efficiency**

# Hyperbaric Oxygen Therapy

- **⊘** Autism Spectrum Disorder (ASD)
- **⊘** Pervasive Developmental Disorder (PDD)
- **⊘** Cerebral palsy
- **⊘** Intoxication
- **Trauma**



Hyperbaric oxygen treatment consists on administering high concentrations of oxygen to the patient in an atmosphere at a pressure of 1.4ATM. Oxygen enters the body, to be distributed by the circulatory system to all organs and tissues. This therapy produces beneficial physiological effects for the patient, attenuates motor deficits, reduces the risk of sequelae and causes changes on cerebral perfusion helping prevent cerebral circulatory disorders.

### Neuroprotection

In addition to improving perfusion through the formation of new blood vessels and brain oxygenation, hyperoxia increases neuroplasticity and stimulates peripheral axonal regeneration.

#### Neovascularization

Hypoxia stimulates the formation of new vessels from angiogenesis and vasculogenesis.

#### Vasoconstriction

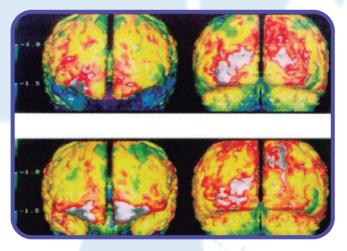
Increased O2 available in small arteries and capillaries helps reduce the inflammatory response and reduced edemas.

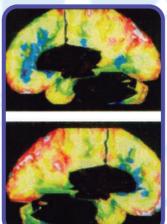
#### Cellular immunity

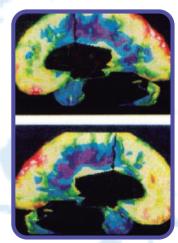
Polymorphonuclear utilizes free radicals as a bactericide mechanism. The presence of oxygen encourages this process and stimulates cellular immunity.

### **Evolution of the treatment**

Number of sessions: 10 Estudio Clínico\*







A normal, healthy brain should be seen primarily yellow in the SPECT scanner. Green indicates decreased blood flow and oxygen. Blue and violet represent a significant reduction in blood flow in the brain.

<sup>\*</sup>Clinical Study: Mild Hyperbarics for Impaired Brain Function, by Dr. Gunnar Heuser, MD, PhD, FACP.

Pathology	Number of cases	Therapeutic Efficiency	Average prescribed sessions	% Sessions Achievement	Patient's Satisfaction	Average Session	Patient´s Evolution
Autism	61	96%	30	94%	94%	62 min	90%
General disorder Development (TGD)	20	87%	30	95%	95%	66 min	92%
Cerebral palsy	45	92%	35	95%	83%	62 min	97%