Hyperbaric oxygenation and neurological recovery in children with organic brain damage

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INTRODUCTION AND OBJECTIVE: In order to determine the effects of hyperbaric oxygenation, 14 Cuban children (8 boys and 6 girls) with affected lesions on the Central Nervous System (CNS), were prospectively studied between September 1994 and September 1995; the patients came from the external consultation of Neuropediatric of the Academic Pediatrics Hospital, Tuna Martyrs, Cuba. PATIENTS AND METHODS: They were evaluated from the neuropediatric and neurophysiologic point of view and submitted to treatment with hyperbaric oxygenation (HBO). Five patients showed a injury to the CNS by severe asphyxia, seven by generalized infections of CNS, one patient with cerebral damage by craneoencephalic traumatism and other with vasoclusive cerebral crisis of siclemic. The average age of the children was of 4.8 +/- 3.4 years. The symptoms and signs were depending on the type on cerebral damage and its evolution. 100% of the children presented infantile cerebral paralysis (ICP) and epilepsy, most of the children were in treatment with antiepileptic drugs, buy they weren't balanced. RESULTS AND CONCLUSIONS: Satisfactory response was observed in patients that were oxygenated within the first year of the lesion, with better and faster results.