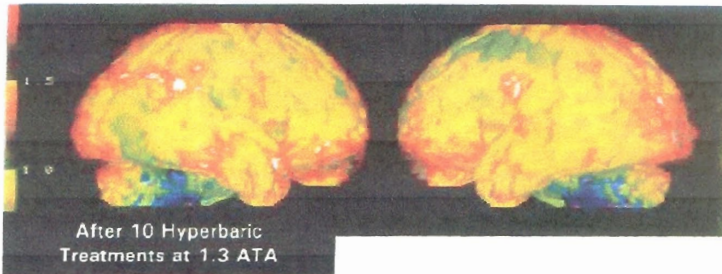
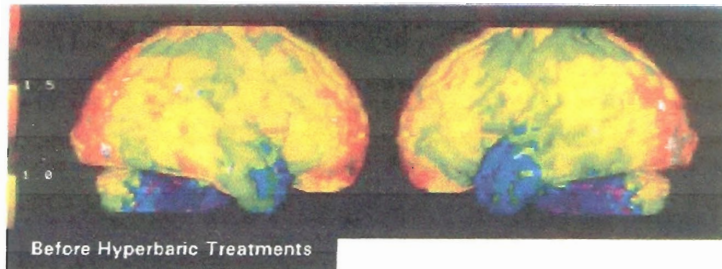


Clinical Study: Mild Hyperbarics for Impaired Brain Function

by Dr. Gunnar Heuser, MD, PhD, FACP

Introduction

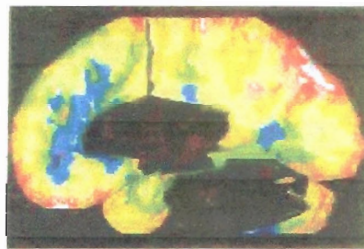
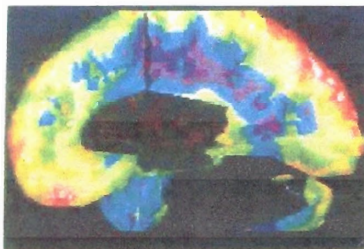
Dr. Gunnar Heuser, a toxic exposure specialist, documented results of a series of hyperbaric treatments on 9 patients suffering from Impaired Brain Function. The purpose was to study the effects of 1.3 ATA of hyperbaric therapy on those patients. His patients included individuals who suffered from impairment to brain function such as memory and balance due to years of exposure to a variety of chemicals, pesticides and solvents. Some patients had developed attention deficit disorder and may well have been experiencing disabling effects that altered their quality of life. It is important to note that MRI scans confirmed that there was no cell death in those patients, only loss of function.



SPECT imaging

SPECT stands for Single Photon Emission Computed Tomography. A scan is performed by injecting the patient with a radioactive substance that travels through the brain and distributes itself according to the circulatory system. The patient's brain is then scanned and a computer creates a three dimensional color image that illustrates the blood flow into all areas of the brain. SPECT imaging helped us by identifying the parts of the brain that are dormant due to a lack of oxygen.

A normal, healthy adult brain should read primarily yellow on a SPECT scan. Green is indicative of less blood flow and oxygen. Blue and violet represent significantly reduced blood flow in the brain.



Methods

Each patient was given a series of 10 hyperbaric treatments: one hour per day for five consecutive days for two weeks. To objectively test the effects of the hyperbaric sessions, SPECT scans were taken of each patient's brain before and after the series of treatments.

