

Undersea Hyperb Med. 1994 Dec;21(4):387-90.

# **Assessment of visual contrast sensitivity in hyperbaric oxygen.**

Oriani G, Magni R, Michael M, Musini A, Durante A, Campagnoli P, Brancato R.

## **Source**

Anaesthesia-Intensive Care and Hyperbaric Department, Istituto Ortopedico Galeazzi, Milan, Italy.

## **Abstract**

Hyperbaric oxygen therapy is used in ophthalmology in ischemic pathologies of the anterior and posterior segments. Our experiment was done on a healthy group of volunteers aged between 10 and 50 yr. We examined the subject's vision before and after acute HBO exposure (60 min at 2.5 atm abs with pure oxygen) to verify whether vasoconstriction induced by hyperoxemia can influence eyesight. We measured the psychophysical determination of the threshold contrast according to Maione-Maffei's zebra test. The results demonstrated that contrast sensitivity is significantly improved for almost all the studied frequencies in normal subjects after acute HBO exposure. We hypothesize that the visual system has a reserve which is activated by an improvement of retinal oxygenation.

PMID:

8000278

[PubMed - indexed for MEDLINE]