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OPHTHALMOLOGIC Indications for HBOT

BioBarica hyperbaric systems presented
by Rheolife

Just Breathe...

Ophthalmologic Indications for HBOT

- Central retinal artery occlusion
- Ocular and periocular gas gangrene
- Cerebro-rhino-orbital mucormycosis
- Periocular necrotizing fasciitis
- Radiation optic neuropathy
- Radiation or mitomycin C-induced scleral Necrosis, and periorbital reconstructive surgery

Other ocular disorders that may benefit from HBOT

- Ischemic optic neuropathy
- Ischemic central retinal vein occlusion
- Branch retinal artery occlusion with central vision loss
- Ischemic branch retinal vein occlusion
- Cystoid macular edema associated with retinal venous occlusion
- Post-surgical inflammation, or Intrinsic inflammatory disorders
- Ocular quinine toxicity
- Purtscher's retinopathy
- Radiation retinopathy
- Anterior segment ischemia
- Retinal detachment in sickle cell disease refractory actinomycotic
- Lacrimal canaliculitis,
- Pyoderma gangrenosum of the orbit and pseudomonas keratitis

Mechanisms of Action

1. Blood vessel constriction resulting in reduced swelling
2. Stimulates the formation of scar tissue
3. New blood vessel formation
4. Stem cell stimulation
5. Increased activity of white blood cells to kill germs

Visual function should be monitored as clinically indicated before, during, and after therapy when HBOT is undertaken to treat vision loss. Visual acuity alone is not an adequate measure of visual function to monitor the efficacy of HBOT in this setting.

Ocular examinations should also include automated perimetry to evaluate the central 30 degrees of visual field at appropriate intervals.

Some ocular disorders require rapid administration of HBOT to restore vision, patients with acute vision loss should be considered emergent when they present. Visual acuity should be checked immediately, including vision with pinhole correction. If the patient meets the criteria for emergent HBOT, normobaric oxygen should be started at the highest inspired oxygen fraction possible until arrangements can be made for HBOT.

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