

Kiralp MZ, Vural D et al. Effectiveness of Hyperbaric Oxygen Therapy in the Treatment of Complex Regional Pain Syndrome. J Int Med Res 2004;32:258-262.

Design: Randomized clinical trial

Brief summary of results:

- 71 patients (49 men, 22 women, mean age 30) were treated for CRPS at a military academy in Istanbul, Turkey
- Injury had occurred approximately 1.5 months prior to diagnosis; all patients were in the acute or dystrophic phase of CRPS; none were in the atrophic phase
- Allocated alternately to 2.4 atmospheres of hyperbaric O₂ (n=37) or normal air (n=34) for 15 sessions of 90 minutes duration, 5 times per week; for safety reasons, the physician administering treatment knew the group assignment of the patients
- Patients were evaluated after completion of 15 sessions and after 45 days
- The outcomes measured were VAS pain score, wrist flexion, wrist extension, and wrist circumference
- For all outcomes except wrist extension, the hyperbaric O₂ group improved more than the control group; the mean VAS in the hyperbaric O₂ group decreased from 6.81 at baseline to 3.72 at 45 days; the mean VAS in the control group decreased from 6.44 to 5.61

Authors' conclusions:

- Hyperbaric O₂ is a well tolerated and effective method of decreasing pain and edema and increasing range of motion in CRPS

Comments:

- Alternative treatment allocation cannot be regarded as randomized
- The assessment of outcome was done by an unidentified examiner who may or may not have been blinded
- The risk of bias is high

Assessment; Inadequate for evidence about the effectiveness of hyperbaric O₂ for CRPS