

SPORTS & HYPERBARICS

Injuries caused by sports-related activities remain a substantial concern with players, coaches and parents alike. As inflammation and pain play primary roles with respect to recovery, hyperbaric oxygen therapy (**HBOT**) has been shown to significantly reduce inflammation and ameliorate pain. Additionally, HBOT can promote fibroblast/collagen activity to accelerate and enhance healing from surgeries and wounds. New evidence supports HBOT as an adjunct and practical treatment to help moderate the effects of traumatic brain injuries and enhance brain imaging results. HBOT is often utilized by physicians and patients to help reach a full recovery from high-impact insults to the body and is currently used by some of the U.S. Olympic Teams to treat sports-related injuries as a part of their official medical techniques and equipment. Studies have demonstrated the benefits of HBOT for sports-related injuries with the following:

ACCELERATE RECOVERY FROM SPORTS-RELATED INJURIES WITH HBOT

- Increases Collagen Production
- Reduces Inflammation & Pain
- Faster & Better Recovery from Sprains, Tears & Bone Fractures
- Stimulates Angiogenesis
- Enhances Recovery from Medial Collateral Ligament (MCL) & Anterior Cruciate Ligament (ACL) Injuries
- Decreases Susceptibility Towards Reinjuring Target Areas
- Rapid Recovery from Concussions & Head Injuries
- Improves SPECT Imaging Results

FASTER RECOVERY FROM SURGERIES WITH HBOT

- Increases Fibroblast Activation
- Reduces Inflammation for Optimal Pre-Op Conditions
- Reduces Risk of Infection
- Stimulates Stem Cell Proliferation
- Decreases Hospital Time

AMPLIFY RECOVERY FROM INTENSIVE TRAINING WITH HBOT

- Accelerates Healing from Acute Muscle Strain
- Improves Blood Flow
- Proliferates the Production of Adenosine Tri-Phosphate (ATP)

ENHANCE PERFORMANCE WITH HBOT

- Improves Concentration
- Increases Serotonin Levels
- Accelerates Jet Lag Recovery
- Decreases Lactic Acid

Study: NFL Athlete Improves Cognitive Functioning with HBOT

In 2011, a case report was published involving an NFL player who suffered multiple concussions. This subsequently led to the development of hydrocephalus, which required emergency shunt brain surgery. The star athlete continued playing and won the Super Bowl, only for his shunt to fail, which led to additional emergency back-to-back surgeries. Following his surgeries, he received 40, one-hour treatments of HBOT. After the treatment protocol, he was independently assessed with neurocognitive evaluations and single photon emission computed tomography (SPECT) brain imaging by the Amen Clinic in California. Marked improvement in 5 out of 6 indices on the MicroCog assessment for cognitive functioning (a computerized assessment sequence designed to detect early signs of cognitive impairment) was confirmed, in addition to substantial enhancements with respect to SPECT imaging.

Kenneth P Stoller (2011) Hyperbaric oxygen therapy in treating sports related TBI/CTE. Medical Gas Research 2011, 1:17

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