



**BioBarica**  
MEDICAL HYPERBARIC SYSTEMS

**Sportology**

**Proven therapeutic efficiency**

## Hyperbaric Oxygen Therapy

- ✓ Training
- ✓ Pre and post surgical
- ✓ Post exercise recovery
- ✓ Ligament and tendon injuries
- ✓ Rehabilitation
- ✓ Wounds
- ✓ Chronic and subacute fatigue syndrome
- ✓ Traumatic and acute ischaemia

It has no  
adverse effects



**Hyperbaric oxigenation  
is a safe and non-invasive therapy**

Hyperbaric oxygen treatment consist of administering high concentrations of oxygen to the patient in an atmosphere at a pressure of 1.4ATM. Oxygen enters the body to be distributed by the circulatory system to all organs and tissues. This therapy achieves a wide chain of physiological benefits to the body and is indicated by many doctors for a lot of sports-related treatments



**Increases performance, maximum ventilatory capacity, ATP synthesis and immune response.**



**Decreases recovery time, heart rate, production of lactic acid and gastric secretion.**

### ▶ Neovascularization

Hypoxia stimulates the formation of new vessels from two processes: angiogenesis and vasculogenesis..

### ▶ Vasoconstriction

During the inflammatory phase of the recovery process, increasing the oxygen available will help reduce swelling and inflammation around the injured tissue.

### ▶ Collagen synthesis

The hydroxylation reaction and crosslinking of the collagen fibers are favored by the presence of high concentrations of O2

### ▶ Osteogenesis

Hypoxia stimulates cell differentiation and calcium-phosphate metabolism, promoting bone formation and repair.



Rehabilitation



Subacute fatigue syndrome



Training



Muscle strain

Pathology	Number of cases	Therapeutic Efficiency	Average prescribed sessions	% Sessions Achievement	Patient 's Satisfaction	Average Session	Patient 's Evolution
Muscle Strain	86	91%	30	90%	86%	63 min	93%
Sports Recovery	46	91%	20	92%	96%	62 min	90%
Rehabilitation	60	92%	20	94%	83%	63 min	86%
Post surgical	38	96%	15	96%	95%	66 min	95%