

Hyperbaric Oxygen Therapy – HBOT

What is Hyperbaric Oxygen Therapy?

HBOT is an abbreviation for hyperbaric oxygen therapy. Hyperbaric oxygen therapy is a medical treatment which enhances the body's natural healing process by delivering oxygen under pressure, increasing the oxygen content in the blood and in the cerebral spinal fluid, flooding the tissues with oxygen.

How Does HBOT Work?

Hyperoxygenation - By increasing the oxygen dissolved in the plasma (the liquid portion of the blood), the lymphatic fluid, and the cerebrospinal fluid, HBOT increases the oxygen available to damaged tissues, stimulating healing.

Neovascularization - HBOT stimulates blood vessel formation (angiogenesis) and collagen (connective tissue) formation in areas that were previously resistant due to lack of oxygen.

Hyperoxia enhanced antimicrobial activity - HBOT reduces or eliminates the effects of toxic substances, bacteria, viruses, and yeast by increasing the tissue oxygen levels.

Hyperoxia enhanced immune response - HBOT activates the white blood cells to fight infection, promoting resistance to infection, as well as wound healing. HBOT also helps to reduce inflammation and oxidative stress.

What conditions are treated with HBOT?

HBOT is FDA approved to treat air or gas embolism, carbon monoxide & cyanide poisoning, crush injury & acute traumatic ischemia, decompression sickness, delayed radiation injury, diabetic foot ulcers, enhanced healing of problem wounds, exceptional blood loss, gas gangrene, intracranial abscess, necrotizing soft tissue infections, osteomyelitis (refractory), skin grafts and flaps (compromised), and thermal burns.

Portable hyperbaric chambers are cleared by the FDA to treat acute mountain sickness only. All other conditions treated by portable hyperbaric chambers are considered off-label uses. Club Essentia utilizes the benefits of HBOT to enhance all of the treatments, programs and procedures conducted at its facility.

HBOT treats the underlying disease process that causes and perpetuates a wide variety of chronic conditions. HBOT is used therapeutically to treat conditions in which tissues have been damaged by oxygen deprivation. When the oxygen is restored to these tissues, much of the lost function returns. HBOT also helps to reduce inflammation and promote wound healing throughout the body and the brain.

What are the difference in types of HBOT?

Club Essentia uses mild HBOT for its hyperbaric oxygen therapy at low pressures, typically 1.3 ATA - 1.5 ATA with compressed room air.

Hard HBOT is hyperbaric oxygen therapy at higher pressures, typically above 1.5 ATA. Hard HBOT is available in monoplace or multiplace chambers with 100% oxygen.

While hard HBOT results in greater oxygen saturation in the tissues, many conditions respond better to mild HBOT. In all of the clinical trials to date, there has been virtually no difference in clinical outcome between mild HBOT with room air and hard HBOT with 100% oxygen.

What is a therapy session like?

For many people, a session in a hyperbaric chamber is no different than an airplane flight but you can use your phones, ipads and any other electrical device you wish. You need to be able to clear your ears to be comfortable. Once you have descended to pressure and your ears adjust, you will feel completely normal in the chamber. While in the chamber you can bring a portable computer or an ipod, along with beverages, blankets, and pillows as you read, listen to music, or watch videos. The size of Club Essentia's chamber allows patients to sit, stand up, exercise, or sleep.

How many sessions are needed?

Depending on the treatment or procedure being performed one to several sessions of 60 minutes can greatly improve the outcomes. For overall enhancement and disease treatment it is recommended an initial group of 40 sessions, one or two per day, for 60 to 90 minutes each, 5 to 7 days per week. After a two to four week break, a second round of 40 sessions is usually recommended. For chronic conditions, people often do hundreds of sessions over a period of years.

Is HBOT safe?

HBOT is incredibly safe. The most common problem experienced by people undergoing HBOT is problems equalizing the pressure in their ears.

“You are your most important asset... Invest in Yourself.” ~ Dr. Ivan Rusilko