

Mild Hyperbaric Oxygen Therapy

Putting Pressure on
Your Illness



What is Mild Hyperbaric Oxygen Therapy (mHBOT)?

mHBOT may be the “stupidly simple answer to many, if not most, health problems”.

mHBOT is a specialised therapy that uses an increase in the atmospheric pressure to allow the body to incorporate more oxygen into the blood cells, blood plasma, cerebral-spinal fluid and joint fluids at greater volume.

How does mHBOT work?

To understand **mHBOT**, a good analogy is a can of fizzy drink. The can is a pressurised vessel, in the can there is liquid, then add a gas. According to Henry’s law, gas under pressure will dissolve into the liquid. Hence the “fizzy” in the drink.

In the Hyperbaric chamber, as the pressure goes up, more oxygen is “pushed” into the fluids to boost oxygen levels. Supplementary oxygen can be added to the chamber via the use of an oxygen concentrator.

This oxygen will become infused into all the body’s fluids, blood, plasma and cerebral fluids. Red blood cells become saturated with oxygen and all remaining oxygen dissolves directly into other body fluids and tissue.



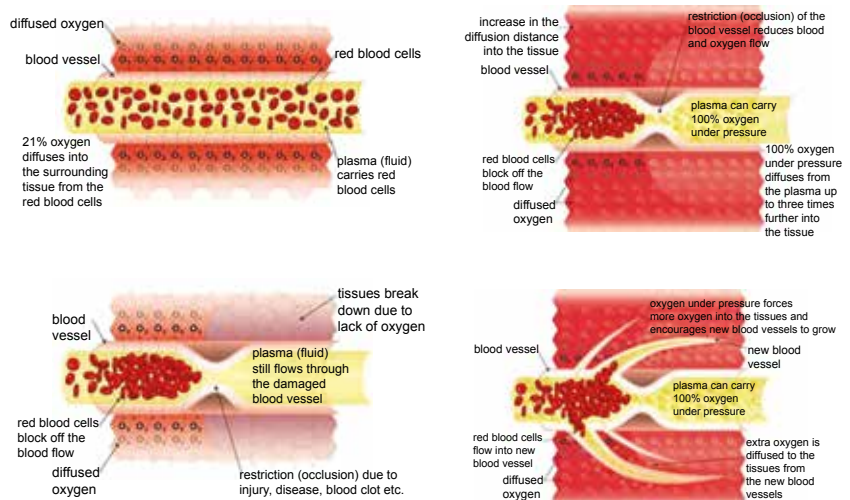
Why is oxygen so important?

Nature dictates that healing cannot take place without adequate oxygen levels in the body’s tissues. Cells and tissues without oxygen die, or become hypoxic.

Hypoxia is a condition in which the body, or a region of the body, is deprived of oxygen.

Hypoxia is a major factor in the development of stroke, heart attack, Alzheimer’s, dementia and cancer.

Oxygen has natural healing properties and increasing the amount circulating throughout the body promotes faster and more effective healing for a wide variety of diseases and illnesses. It also provides numerous preventative health benefits.



mHBOT may also...

- Stimulate growth of new blood vessels to locations with reduced circulation, including areas of arterial blockage.
- Aid in the treatment of atherosclerosis, stroke, wound healing and brain injury, including Autism and dementia.
- Increase energy, stamina and endurance levels, while reducing fatigue.
- Provide the optimal environment for the body to carry out vital cell processes.
- Increase the capacity for the body to heal itself by increasing production of stem cell and vascular endothelial growth factors (VRGF).



mHBOT is a treatment, that nobody can afford to ignore.

What is the History of mHBOT?

It's history can be dated back to 1662 when a British physician, using a system of organ bellows and valves, discovered that acute illness responded better to increased oxygen pressure.

By 1878 Paul Bert, a French physiologist, had discovered the link between decompression sickness and nitrogen bubbles. He correctly hypothesized that the pain from decompression sickness could be reversed with recompression.

In the 1930's, the US military were using HBOT to treat deep-sea divers with decompression sickness.

By 1955, studies had shown that HBOT was effective in increasing the benefits of radiation treatment on cancer patients.

In the 21st century, as rapidly increasing amounts of clinical and medical research validates this overlooked and often misunderstood treatment, HBOT is now FDA approved.



How could mHBOT benefit me?

- ✔ Significantly reduces oedema
- ✔ Significantly reduces the inflammatory process
- ✔ Improves range of motion
- ✔ Increases the production of collagen
- ✔ Increases the healing and recovery process
- ✔ Supports scar tissue rehabilitation
- ✔ Promotes greater tissue strength
- ✔ Enhances the growth of new blood vessels (Angiogenesis)
- ✔ Increase oxygen levels in tissues (Hyperoxia)
- ✔ Increases oxygen perfusion around wounds
- ✔ Stimulates new capillary growth
- ✔ Improves bone regeneration for faster recovery
- ✔ Stimulates stem cell and growth factors
- ✔ Destroys anaerobic bacteria
- ✔ Increases removal of toxic bio-waste
- ✔ Increases white blood cell production
- ✔ Increases effectiveness of antibiotics
- ✔ Strong anti-microbial effect
- ✔ Reduces surgery complications for smokers
- ✔ Improves physical training (strength, energy and endurance)
- ✔ Improves memory and concentration
- ✔ Increases production of natural killer T-cells



The remarkable story of Sandy Phosfeld

Maureen Phosfeld had been married to Sanford (Sandy) for 34 years. A robust and vigorous railroad dispatcher until he was 58 years old.

On February 19th he experienced a severe cerebral vascular insult (CVI) to the right side of his brain. Diagnosed by his neurologist as having a progressive form of stroke, the most deadly form, Maureen was told that Sandy wasn't expected to live.

Things seemed hopeless:



My husband lay in that hospital bed for over a month and slept the entire time, he hardly ever opened his eyes and spoke not at all. His attending physician told me that would be as far as Sandy would get to returning to the real world. He advised me to institutionalise him because he required 24 hour nursing care, something I could not manage at home. I did place my husband with a rehab centre. While he was there he fell out of his wheelchair three times because of insufficient nursing supervision. He had no movement ability or physical coordination and couldn't resist gravity. So I took him out of the institution and began nursing him myself, feeding him through a naso-gastric tube, washing him and all the other jobs one must perform for a helpless individual person.

He was officially classed as bed-ridden and beyond rehabilitation. He was, in essence, a "vegetable", with the poorest prognosis.

But then, 6 years later, I read in my city newspaper about Hyperbaric Oxygen Therapy as a viable treatment for stroke. So I telephone for an appointment and travelled with Sandy to the facility operated by Dr. Richard Neubauer, MD. Naturally I didn't expect miracles. I was only hoping that my husband would learn to speak my name, swallow a sip of water, or turn himself in bed. I prayed that HBOT, as it's labelled in medical short hand, might do that.

By the end of 13 Hyperbaric Oxygen treatments, nothing much had happened except that Sandy was showing a growing agitation. He had awakened out of his lethargy and wanted something from me but made nothing known. Then, suddenly, on his 14th HBOT, he amazed the clinic staff, the doctor and myself. Sandy spoke words to us.

That evening he turned himself over in bed, became progressively more active during each day and actually participated in his physical therapy sessions. He cooperated with his therapists and moved parts of his body that seemed immovable before. In another week he used his legs to push himself in his wheelchair. He spoke whole sentences, moved his left arm and squeezed a rubber ball. We returned home after he had undertaken 20 Hyperbaric treatments. He spoke without slurring his words, ate full meals, remained awake during most of the daylight hours and, once again, became my companion.



Acting on Dr. Neubauer's referral, Mrs. Phosfeld found another Hyperbaric chamber facility closer to home and Sandy continued his treatments and, although he hasn't returned to work, he has been rehabilitated at least 90%. mHBOT was the main instrument of his recovery. It returned Sanford Phosfeld to a stable condition so that he gets around on his own, tends his garden, plays golf, visits his grandchildren and fulfils his needs like any other retired person.



NOTE: More than 1,000 patients who sustained cerebrovascular disease and have been treated with HBOT have shown improvements that range from 40% – 90%.



Medical Science and HBOT

"Hyperbaric Oxygen Treatment for Inflammatory Bowel Disease: a Systematic Review and Analysis"

—Journal of Medical Gastroenterology. March 2013.

Conclusion: *"In patients with Crohn's Disease, 78% had clinical improvements, while all 39 patients with ulcerative colitis improved."*

"HBOT lowered markers of inflammation and oxidative stress and ameliorated inflammatory bowel disease in both human and animal studies".

"Hyperbaric Oxygen Induces Late Neuroplasticity in Post Stroke Patients - Randomised Prospective Trial"

—University of Muster, Germany. January 2013.

Conclusion: *"The clinical results indicate that HBOT can lead to significant neurological improvements in the post stroke patients, even at chronic late stage. The observed clinical improvements indicate that neuroplasticity can still be activated long after damage onset."*

"Hyperbaric Oxygen Therapy (HBOT) for Reduction of Secondary Brain Damage in Head Injury"

—Journal of Neurotrauma, 21:44-48. 2004

Conclusion: *"Translational research of HBOT in a variety of Traumatic Brain Injuries (TBI) models has shown neuroprotective effects in the absence of increased oxygen toxicity. Recent clinical trials favour HBOT as promising safe therapeutic strategy for severe TBI patient."*

"Applications of Hyperbaric Oxygen Therapy and Surgery"

—Division of Surgery, University of Nevada School of Medicine, Nevada, USA. 1992.

Conclusion: *"Many factors can delay wound healing such as oedema, infection, anaemia, poor perfusion and poor oxygen supply. The consequences of these factors is low oxygen tension, which adversely effects neutrophil, macrophages, collagen synthesis and fibroblast function during inflammation and repair. Hyperbaric Oxygen Therapy successfully negates these problems."*



"Treatment of Lyme Disease with Hyperbaric Oxygen Therapy"

—Undersea and Hyperbaric Medical Society Annual Meeting. 1998.

Conclusion: *"Although additional statistical evaluation is still being carried out, it appears that approximately 84.8% of those treated with HBOT protocol showed significant improvement by a decrease in eliminations of symptoms."*

"Hyperbaric Oxygen and Thrombolysis in Myocardial Infarction"

—The American Heart Journal, September 1998.

Conclusion: *"Hyperbaric Oxygen Treatment (HBOT) in combination with thrombolysis has been demonstrated to salvage myocardium in acute myocardial infarction (AMI). Treatment with HBOT appears to be a feasible and safe treatment for AMI and may result in an attenuated rise in creatine phosphokinase and a more rapid resolution of pain."*

"Hyperbaric Oxygenation for the Treatment of Acute Cerebral Oedema"

—Journal of Neurosurgery, January 1992.

Conclusion: *"Hyperbaric Oxygenation can be effective in reducing intracranial pressure by decreasing cerebral blood flow. It's ability to concomitantly increase cerebral oxygenation suggests it's application for the treatment of traumatic cerebral oedema."*

"How mild Hyperbaric Oxygen Therapy (mHBOT) worked and why it's good for our children"

—Medicinal Veritas, 2 647. 2005.

Conclusion: *"Children on the autistic spectrum experience improvement in a wide range of their symptoms with mHBOT treatments, including increased language ability, better socialisation, less aggression, improved bowel function and better cognition, to name a few."*

"Effects of Exposure to Hyperbaric Oxygen for the Treatment of Acute Soft-Tissue Injury"

—Clinical Journal of Sports Medicine 13 (3): 138-147. 2003.

Conclusion: *"In many cases of sport injury, surgery is often required. Treatments that can speed up the healing process are of greatest interest to the patient and the doctors. The advantages of HBOT are the known benefits in reducing swelling, decreased inflammation, improved collagen deposition in the skin and increasing the growth of new blood cells."*

"Hyperbaric Oxygen Therapy in Sports Injury"

—Journal of Applied Physiology 106 (2): 711-728 2009.

Conclusion: *"By coupling the advances in sports medicine, physical treatments and Hyperbaric medicine, we will accelerate the time to recovery, compliment surgical procedures and enhance the outcomes of physical therapy. As many professional sports teams have discovered, HBOT is a real tool to enhance their performance and reduce their down-time from injuries."*



The HBOT Experience

You will feel a change in ear pressure (similar to the feeling on an aeroplane). The remainder of the treatment will be peaceful and tranquil. A good time to relax, sleep, read or watch a movie.

Side effects reported are a slight pressure in the ear for a short while, a pleasant feeling of euphoria. Others have reported having their best night's sleep after a session; others say it's like having the "cob-webs" removed from their brains!

Treatment Schedule

We are all unique individuals and our response time to any treatment is equally unique.

Research shows that chronic conditions such as Stroke, Coronary Heart Disease and Diabetic Ulcers, usually require 20–40 sessions.

- Acute sprain/strain injury. Individual results vary but expect considerable healing within 5–10 visits
- Pre and post surgery recovery. 2–3 treatments can prepare your body to recover better. After surgery a further 2–3 treatments will help decrease inflammation in tissue that causes pain and swelling. (Please discuss your surgery details with your Hyperbaric technician to ensure the appropriate treatment is given.)
- Detoxify or decrease inflammatory conditions such as Crohn's, Ulcerative Colitis or Irritable Bowel Disease (IRB), studies show significant improvement in 10–20 sessions.
- Autism, Cerebral Palsy, Multiple Sclerosis, Stroke, Traumatic Brain Injury (TBI), Concussion, Bells Palsy or Alzheimer's Disease, a minimum commitment of 40 sessions is recommended due to the time required for the body to heal. These conditions also respond quickly when incorporated with certain dietary changes and nutritional supplementation.

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