

## WHAT CONDITIONS CAN BE TREATED?

The mainstream and hospital-based uses for Hyperbaric Oxygen Therapy (HBOT) include the following:

- Air or gas embolism
- Carbon Monoxide poisoning
- Acute traumatic ischemia
- Exceptional blood loss
- Cyanide poisoning
- Decompression illness ('bends')
- Clostridial myonecrosis
- Radiation proctitis
- Some non-healing wounds
- Gas gangrene
- Necrotizing infections
- Some cases of osteomyelitis
- Radiation-induced tissue damage
- Compromised grafts and skin flaps
- Burns
- Compartment syndrome

There are a growing number of extra conditions that may respond to increased oxygen levels. For many of these the level of scientific proof is limited and they have not, as yet, become part of the routine hospital use of HBOT and may be considered experimental.

## These include:

- Cerebral palsy
- Stroke
- Multiple Sclerosis
- Head injuries and concussion
- Chronic fatigue
- ADD/ADHD
- Sports injuries
- Autism
- Idiopathic sudden deafness
- Migraine + cluster headaches
- Systemic fungal infection
- Parkinson's disease
- Trigeminal neuralgia
- Raynaud's phenomenon
- Vascular disease
- Crohn's disease (especially if fistula)
- Fibromyalgia
- Decreased immune function
- Venomous bites
- Retinal artery occlusion
- Before and after surgery
- Mycoplasma + Lyme's disease

## WHAT IS INVOLVED?

The number of hyperbaric oxygen sessions required will depend on the condition being treated. Most patients require between 5 and 30 treatments and will usually have these treatments once a day from Monday to Friday. Certain conditions may require treatment frequencies greater than once a day and for a varied number of total treatments.

The sessions involve sitting or lying comfortably inside a hyperbaric chamber where the patient breathes pure 100% oxygen from a specialised hood while at a pressure of 1.5 to 2.4 ATA. The treatment times are between 60 and 90 minutes (the time, pressure and requirement for air breaks may vary depending on the condition being treated).

The chamber operator monitors the patient by audio contact and video surveillance. An attendant may also be present, especially for the first few treatments or if there is any medical indication.

The set up of the chamber, related equipment, protocols and staff training passed the stringent requirements of ISO 9001:2000 accreditation and there is now ongoing testing of equipment according to national guidelines.

All people going into the chamber are given pure cotton clothing to wear and are requested to remove jewelry and makeup as a precaution against any fire risk.

### IS IT RISKY?

There are some possible risks when receiving oxygen under pressure which are mostly temporary and minor. Serious complications are very rare. These risks include:

- Barotrauma (mainly related to ears and sinuses)
- Serous otitis
- Claustrophobia
- Near sightedness
- Temporary improvement in far sightedness
- Maturing of cataracts
- Numb fingers
- Fatigue
- Medication related
- Oxygen toxicity
- Decompression illness
- Gas embolism
- Fire risks

### HOW ABOUT FITNESS?

All patients are assessed for their fitness prior to entering the hyperbaric environment. There are few contraindications to HBOT including pneumothorax, ENT disease that prevents pressure equalisation, severe claustrophobia and certain drugs – Cisplatinium, Bleomycin, Doxorubicin & Disulphiram.

### HOW MUCH?

We have a contract with ACC for chronic non-healing traumatic wounds. Most other conditions require private funding, although some insurance companies will cover certain types of HBOT.

The cost of sessions depends on the length of treatments and the number required.

For further information please contact our hyperbaric nurses on (03) 540 2211 or email [hyperbaricnurse@mapuahealth.com](mailto:hyperbaricnurse@mapuahealth.com) or visit [www.mapuahealth.com/hyperbaric-medicine](http://www.mapuahealth.com/hyperbaric-medicine)



# HYPERBARIC OXYGEN THERAPY



### HOW DOES IT WORK?

- ✓ **Angiogenesis** – stimulates growth of capillaries in hypoxic tissue
- ✓ **Hyperoxygenation** - high levels of oxygen can help the repair of cellular function
- ✓ **Osteogenesis** - HBOT can stimulate the production of new bone cells
- ✓ **Microbiological** - helps eliminate bacteria
- ✓ **Immune stimulation** –increased phagocytosis and natural killer cells
- ✓ **Decreased inflammation**
- ✓ **Bubble reduction** –decreases nitrogen bubbles in decompression illness
- ✓ **Tissue repair** – increase in stem cell production may help in tissue repair