

# **HYPERBARIC OXYGEN THERAPY**

## **Patient Information Guide**



**London Hyperbaric and  
Wound Healing Centres**

**London      Gt. Yarmouth**

## **Mission Statement**

To deliver safe high quality hyperbaric care, treatment, training and research in a timely, cost effective and efficient manner by a highly motivated team of enthusiastic dedicated individuals working together in a pleasant environment for the benefit of the patient.

LHM Healthcare  
London Wound Healing Centres Ltd.  
Whipps Cross University Hospital  
Leytonstone,  
London E11 1RG

Tel: 0208 539 1222

Fax: 0208 539 1333

[www.lhmhealthcare.com](http://www.lhmhealthcare.com)

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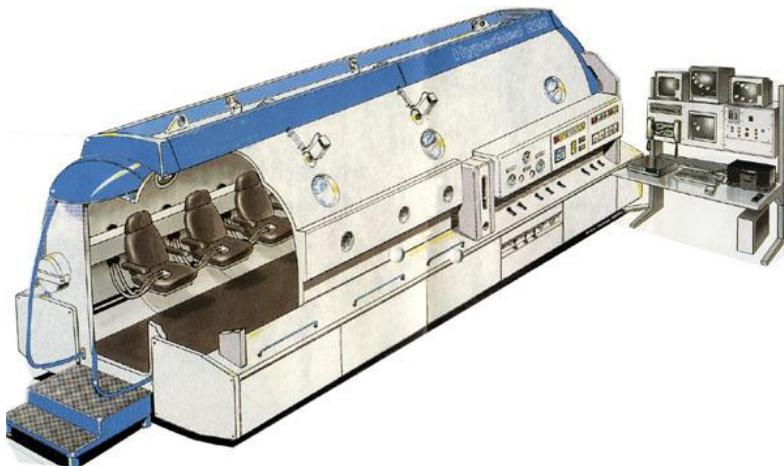
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# What is Hyperbaric Oxygen?

Oxygen forms about 21% of the air we breathe. Oxygen masks are commonly used to give more than this percentage in medical treatments. In some situations, it is necessary to give even more oxygen than can be given by ordinary masks. To do this, it is breathed at a pressure greater than atmospheric pressure whilst inside a Therapy Chamber. This is **HYPERBARIC OXYGEN (HBO)**.

Breathing oxygen whilst under pressure inside a Therapy Chamber can dissolve more than ten times the amount of oxygen in the blood plasma than is possible breathing air, or more than three times as much oxygen as administered in a hospital ward.

The extra oxygen is delivered to organs in the body, where it will have a beneficial effect on the healing process.



One of our Hyperbaric Therapy Chamber

## How is Hyperbaric Oxygen Administered?

Hyperbaric Therapy chambers are used to provide the patient with oxygen.

We have two main forms of equipment that deliver Hyperbaric Oxygen:-

- Monoplace Chamber. (1 person chamber)
- Multiplace Chamber (up to 9 persons)

### The Monoplace Therapy Chamber

The monoplace therapy chamber is a transparent tube in which the patient lays down for the treatment. The whole chamber is compressed on air and oxygen is delivered to the patient via a Built-in-Breathing System with a mask..



Patient receiving treatment in our monoplace chamber

## The Multiplace Therapy Chamber

The multiplace therapy chamber is a large tube with a walk in door and seating inside. This chamber seats between eight and ten people and is big enough to walk around in. The chamber is compressed with air and the patients breathe oxygen via a hood tent or facemask. Patients can read books and magazines during the treatment; we also have in-chamber headsets to listen to your personal choice of music (CD's only).



Inside the Multiplace Therapy Chamber

## **What is HBO used for?**

The British Hyperbaric Association (BHA) and the European Committee for Hyperbaric Medicine (ECHM) have published guidelines on the recommended use of HBO, as follows: -

- 1. Decompression illness ('the bends').**
- 2. Air or gas embolus.**
- 3. Severe carbon monoxide poisoning.**
- 4. Clostridial myonecrosis ('gas gangrene').**
- 5. Necrotizing fasciitis.**
- 6. Crush injury and compartment syndrome.**
- 7. Non-healing hypoxic wounds.**
- 8. Radiation bone necrosis, soft tissue Radionecrosis**
- 9. Refractory osteomyelitis.**
- 10. Severe haemorrhagic anaemia.**
- 11. Compromised skin flaps and grafts.**
- 12. Severe thermal injury (burns).**

Other conditions are the subject of current research.

## Staffing Arrangements

All the staff are specially trained to work in the facility, and there is a full technical back-up service. The minimum team consists of You (the patient), a Doctor, a Chamber Attendant (Nurse) and a Chamber Operator/ Technician. Each treatment is technically lead by the Duty Supervisor, who is responsible for the safe running of the chamber during pressurisation.

Patients are never left alone and will always be accompanied by an attendant during each therapy session. All team members are multi-skilled and you may have a different attendant inside with you each day. This allows staff members to carry out more than one role in the facility and aids to a better treatment environment. We firmly believe in a close team approach to your treatment, so please feel free to discuss any matters with any member of our staff. If they are unable to help, they will find you someone who can.

Our Hyperbaric and Wound Healing Centres employ teams of experienced Hyperbaric Physicians, who are led by a Medical Director who is an NHS-consultant. Our facilities also employ a Nurse Manager, a team of Nurses, Hyperbaric Supervisors, Technicians and Operators who are responsible for the safe operation of the facility and the provision of a 24 hour 7 days a week service. All members of Staff have successfully completed the necessary courses in Hyperbaric Medicine and are qualified in accordance with the European Code of Practice for the Safe Management of Hyperbaric facilities.

## Some frequently asked questions

### What will I wear?

Safety in a pressurised environment is very important. Therefore, the Staff are very vigilant about things that they allow in the chamber. For this reason you will be asked to change from your outdoor clothes into the chamber scrubs provided by the facility.

In the multi-place and monoplace chambers you may wear your undergarments. Undergarments worn in the monoplace chamber must be 100% cotton. The primary reason for the cotton clothing is to prevent static and therefore minimise any fire risk. Patients are encouraged not to wear jewellery, as it makes the application of hood tents and masks more difficult. There are lockers available to you for your valuables and you may carry the key with you to ensure that your valuables are safe. Patients are asked not to leave any belongings in the waiting or changing areas. Unfortunately, we cannot accept responsibility for any damage or loss of valuables.



*Inside the chamber wearing a mask and hood-tent*

## **What will my treatment feel like?**

During the increase of pressure in the chamber, you will notice a slight rise in the temperature in the chamber. This is normal and the temperature returns to normal when your treatment pressure is reached. The inside attendant can request additional cooling ventilation. During decompression, the chamber temperature will become cooler. Cotton blankets will also be available.

The most common sensation you will feel is fullness or discomfort in the ear, similar to when in an aeroplane. It is due to unequal pressure on either side of your eardrum. You will be taught how to cope with this before treatment begins. Your ears may pop or crackle as the pressure equalises, this will not hurt or be harmful in any way. If you feel discomfort or pain ask your attendant to immediately pause the treatment while you overcome your discomfort. It is important that you declare pain and discomfort immediately, so as not to cause damage to your eardrums. The other patients will understand, as many of them will have experienced the same problems before.

## **How do I contact a specialist?**

Patients may call our Duty Doctor at any time during normal working hours for advice on Hyperbaric Oxygenation and how to proceed with the process of referral. Elective referrals are normally made to us through your NHS-consultant or GP who would seek our advice on the probable effectiveness of HBO on an individual basis.

One of our Hyperbaric Staff will then contact the patient directly and arrange for an assessment to take place at short notice. Our facilities usually have no waiting lists for these assessments, which can normally be set up within a few days.

After the assessment, individual cases will be presented to the appropriate Primary Care Trust (PCT) or commissioning agency by our medical team, so that approval can be granted before treatment begins. The speed at which approval may be granted depends on the PCT's assessment of our presentation and the financial resources available to them for this particular therapy. This process can take between 2 weeks and 3 months and may finally be turned down completely in some cases. A member of our clinical team will contact the patient directly, as soon as we have received final notice from the PCT, concerning the request for funding approval.

Transport arrangements will be discussed at the time of the assessment and our staff will help where they can to ensure timely and appropriate transport.

## **How long will the treatment last?**

Hyperbaric Oxygen Therapy is normally administered once a day, in a series of 2-hour sessions, in one of our therapy chambers. Patients will be informed well in advance of the treatment schedule, which could consist of between twenty and sixty sessions spread out over a number of weeks.

Most daily therapy sessions take place between 10.00 hrs and 12.00 hrs in the mornings, but patients will not normally be expected to attend on weekends.

The maximum benefit of this therapy is achieved when all sessions are regularly attended and we advise against taking long breaks between sessions, unless these are for medical reasons.

## **What are the possible side effects of this treatment?**

Like any kind of treatment, there is always the possibility of side effects, these include:

- **Pressure damage to ears, sinuses, lungs, teeth or any other air filled cavities (Barotrauma)**
- **Oxygen Toxicity of the Lungs (Respiratory) or the brain (Central Nervous System)**
- **Claustrophobia**
- **Occasional short sightedness that resolves when the treatment is stopped**

Please discuss side effects with the appropriate member of staff for a more detailed explanation.

## **What happens on my first visit?**

Patients visiting the facility for the first time will be given an in-depth briefing on our services, the benefits, risks, possible side effects of hyperbaric oxygen and all other matters relating to their treatment. A Hyperbaric Physician together with a member of our Nursing Staff, will carry out the initial briefing at the time of the assessment. All Patients are encouraged to ask any members of staff for additional information or further clarification. Information leaflets are available for more detailed information on various aspects of the treatment we offer.

## **Can relatives and friends visit me?**

Relatives and friends are welcome to visit our In-patients during normal hospital opening hours and should contact the On-Duty Supervisor for out-of-hours enquiries. Our patients will not be available for contact during normal treatment in our chambers. A friend or relative may accompany you to the facility provided that the privacy and dignity of other patients is respected.

## **What does HBO cost?**

Most services and treatments provided by our Hyperbaric and Wound Healing Centres are undertaken, either on behalf of the NHS and are therefore free, or are covered by private health insurance. Some patients however choose to pay for our services directly and a tariff is available from our local office. Costs vary from one patient to another and Hyperbaric Oxygenation is a relatively expensive form of therapy. Patients wishing to enquire about the cost of their treatment have a right to do so and may ask our Physicians at any time for this information. Travel costs to and from the hospital are normally the responsibility of the patient.

## **Privacy and dignity of patients**

London Hyperbaric and Wound Healing Centres Ltd. makes every effort to ensure that all patients are treated with respect and afforded the appropriate measure of dignity and privacy. Toilets are available on the premises for everybody, including disabled patients. Consultations and examinations are carried out in the privacy of the doctor's examination room and private changing facilities are available to all patients before and after treatments.

## Items and materials that should not be taken into the chamber

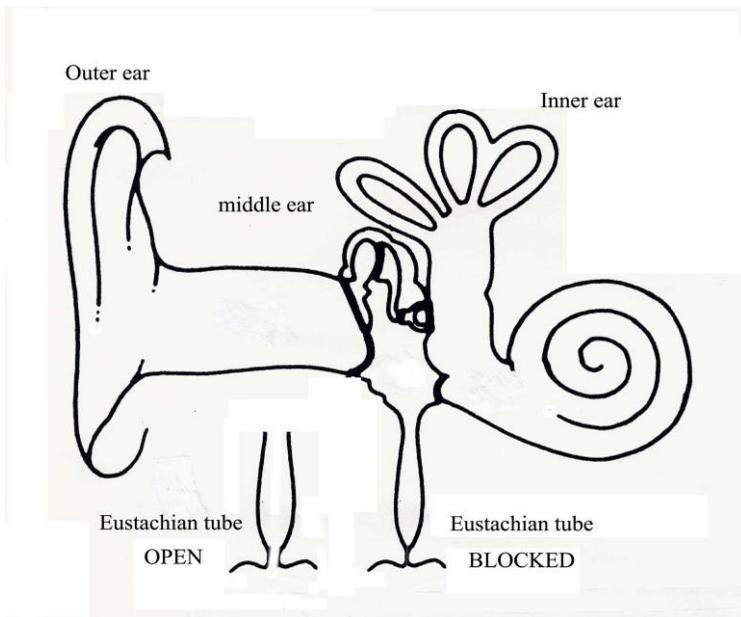
The following items comprise a reasonably comprehensive list of items and materials that should not be allowed in the chamber as drawn up by the British Hyperbaric Association:

- a. Adhesives
- b. Aerosols
- c. Aftershave/perfume/makeup
- d. Alcohol
- e. Batteries with unprotected leads
- f. Chemical cleaners, e.g.; trichlorethylene, `freon`, etc
- g. Cigarettes, cigars, tobacco of any kind
- h. Cleansing powder
- i. Drugs, non prescribed
- j. Electrical equipment incl. tape recorders, radios, etc
- k. Explosives
- l. Thermometers, incl. tape batteries containing mercury
- m. Ink pens
- n. Lighters, matches
- o. Non-diving watches
- p. Petroleum based lubricants, grease, fluids
- q. Sugar, fine powders and other flammable food stuffs
- r. Thermos flasks
- s. Bedding; including blankets, sheets, pillows, mattresses, etc. except for 100% cotton or treated materials.
- t. Newspapers

While treating you at our facility, we want to ensure your safety and request your help in ensuring that none of the above items are ever taken inside the chamber. Our facilities have procedures in place to make sure that both staff and patients are checked prior to each treatment.

## Ear clearing explained for hyperbaric patients

All pressure changes during treatment are carried out slowly and under strict supervision. Anyone may request a pause in the compression without concern for other chamber occupants. To avoid pressure damage (barotrauma) we must all learn how to equalise the pressure in the air spaces in our bodies. The most immediate and obvious space will be our ears.



*The human ear*

Staff will be present before and during the treatment sessions to give guidance on the best techniques to be used. Patients with colds, Hay fever or other conditions, which may affect the sinuses, should speak with the staff before each treatment session, as decongestant medication may be required.

If a nasal medication is prescribed then it should be taken well before the start of the treatment.

You will be shown how to take this effectively to gain the maximum benefit. Decongestant tablets require 1 to 2 hours to take effect. Nasal sprays will not be used too often as they may cause a rebound reaction with a worsening of the congestion.

## **Organisational structure**

London Wound Healing Centres Ltd, is a company specialising in the provision of Hyperbaric Oxygen and specialist Wound Healing services for NHS-hospitals. We operate as regional centres of expertise under the clinical governance umbrella of our host NHS-Trusts. We are part of the LHM Healthcare Group of Companies and Service Providers.

Our centres are registered with the Care Quality Commission under the National Care Standards Act 2002, and satisfy all the provisions required for Independent Healthcare Facilities. A copy of the registration Certificate is displayed in the waiting area. The address of the Care Quality Commission is:

### **CQC**

Finsbury Tower,  
103 –105 Burnhill Row,  
London EC1Y 8TG

Telephone: 020 7448 9200

## Comments / Complaints

We welcome comments and suggestions about the service we provide. If you want to make a complaint about your treatment, we follow the standard procedure used by our host hospitals. The facility staff will guide you through this process. Complaints about the general service and or facilities within the department will be handled by

The Managing Director: Mr Philip Sayers,  
**London Wound Healing Centres Ltd.**  
Telephone: 020 8539 1222  
E-mail: p.sayers@nhs.net

If you wish to make complaint about the Hyperbaric Facility of your treatment in confidence, it will be handled by the host Hospital's Complaints Department, details of which are available in the main hospital reception.

A step-by-step guide on making a complaint/comment/suggestion can be found in the Patient Waiting Area.

This leaflet was last updated in July 2007. We would be grateful, if you have any feedback on the contents of this leaflet, that might improve the information we give to our patients.



**London  
Hyperbaric Medicine**

**Whipps Cross University Hospital  
Leytonstone, London E11 1RG**

Telephone: **0208 539 1222**  
Duty Supervisor: **07999 292 999**  
Duty Doctor: **07736 898 066**  
Fax: **0208 539 1333**

[mail@londonhyperbaric.com](mailto:mail@londonhyperbaric.com)  
[www.lhmhealthcare.com](http://www.lhmhealthcare.com)



**East of England  
Hyperbaric Unit**

**James Paget University Hospital  
Lowestoft Road, Gorleston, Great  
Yarmouth, Norfolk NR31 6LA**

Telephone: **01493 452 452**  
Duty Supervisor: **07894 683 453**  
Duty Doctor Hotline: **01493 603 151**  
Fax: **01493 45 3526**

[mail@yarmouthhyperbaric.com](mailto:mail@yarmouthhyperbaric.com)  
[www.lhmhealthcare.com](http://www.lhmhealthcare.com)