

Respiratory physiology

Long-term oxygen therapy (LTOT)

Information for patients, relatives and carers

Introduction

This leaflet has been designed to give you information about **long-term oxygen therapy.** We hope it answers some of the questions that you or those who care for you may have. It is not meant to replace the discussion between you and your medical team. It aims to help you understand more about what is discussed. If you have any questions about the information below, please contact us.

Long-term oxygen therapy (LTOT)

Long-term oxygen therapy (LTOT) is provided by a small machine that you keep in your house. It filters oxygen from the air and funnels it through a small tube that goes to the entrance of your nostrils (nasal cannulae).

You may have had a tube like this if you needed oxygen while you were in hospital.

In some lung diseases, your oxygen level in your blood is not as high as it should be. This can cause you to feel breathless and tired more easily, especially when you are active. Oxygen therapy increases the oxygen level in your blood, so it does not drop too low.

Some people may need to use it all the time, others just when they are sleeping or when they are active.

In LTOT the aim is to use the oxygen for at least 15 hours per day. It should always be used at night and then the rest of the hours can be used during the day. Using it in this way has been shown to improve length of life in those with persistently low blood oxygen levels.

You must be assessed to determine if you are suitable to have LTOT or not.

Assessing you for LTOT

If your doctor thinks you may be suitable for LTOT, we will arrange to see you for an assessment. This normally involves two visits, several weeks apart.

You will be seen by a respiratory physiologist.

At the first visit:

we will ask you a range of questions about your home, social life and level of mobility.
This will allow us to gain an understanding of where and how oxygen might be beneficial

 we'll take a sample of blood from an artery in your wrist so we can determine your oxygen and carbon dioxide levels. The results are available straight away. Based on these results we'll decide if you should come for a second visit

At the second visit:

 we'll take another sample of blood, either from your wrist or earlobe. This will be compared to the previous blood result. If they both show that LTOT may help, then we can test how much oxygen you may need by giving you some and taking further blood.

We will only ever carry out one blood test from the wrist at any one appointment. Any others will be taken from the earlobe.

Risk assessment

Oxygen is a flammable gas, which means it can ignite and explode. So, we must be very cautious with those who smoke or are exposed to smokers in their home or social environments. We will do a risk assessment to ensure your home environment is safe for oxygen.

Starting LTOT

If your blood results show that LTOT may help, we'll discuss with you what it involves and whether you'd like to trial it.

If you decide to start LTOT, we'll send a prescription to your local oxygen supplier. They will bring you the equipment within a few days and show you how to use it. We'll then arrange to see you three months later, while you are using LTOT. (After that we'll see you annually.)

It is vital that you do not use a higher flow rate than that prescribed as too much oxygen can be dangerous.

It may be useful to discuss starting home oxygen with those close to you. You can also bring someone along to the appointment.

You will remain a patient of our oxygen clinic while you are using oxygen, unless there is somewhere nearer your home that can monitor you. We will see you at least once a year to check if we need to adjust your oxygen flow rate.

Some people only need oxygen for a few months, others may need it for longer.

Deciding to use LTOT

You must want to use LTOT for it to work for you.

LTOT equipment can be very expensive for the NHS. So, if you decide you do not want it, you must let us know. We can arrange for it to be removed from your home.

Useful contacts

Your appointment letter will tell you which hospital the test is booked at. The telephone numbers for each site are listed below.

Lung Function Lab numbers:

Hammersmith Hospital 020 3313 2352

St Mary's Hospital 020 3312 6022

For information about accessing our hospital sites, including public transport and parking information, please visit the Trust's website: www.imperial.nhs.uk

How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3312 7777** (10.00 – 16.00, Monday to Friday). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: 020 3312 1337 / 1349

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team: imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

Respiratory Physiology Published: September 2024 Review date: September 2027 Reference no: 1504 © Imperial College Healthcare NHS Trust