Patient Information Sheet: Emergency Oxygen Therapy

What is oxygen therapy and how does it work?

The air around you is made up of 21% oxygen. Most of the rest of the air consists of nitrogen which is not used by the body. Both oxygen and nitrogen are colourless and odourless gases. Medical oxygen is almost 100% pure but the oxygen mask or nasal prongs will dilute the oxygen with room air to give you the dose of oxygen that you require. The required oxygen dose can vary from 24% up to 100% oxygen in some circumstances. Because of this, medical oxygen is considered a drug and must be prescribed by a doctor or other qualified professional. Every cell in your body needs oxygen to work properly. Some medical conditions make it harder for the body to get the oxygen into the lungs and you may feel breathless because your body is working harder. Oxygen therapy is a way to give you some extra oxygen and the main aim is to treat the low amounts of oxygen in your blood stream and bring them up to normal levels.

How do I know if I need oxygen?

If you do not get enough oxygen, you may feel breathless or become tired. However, it is also possible to have a low oxygen level and need oxygen treatment without having noticed breathlessness. You can also be breathless and have a normal oxygen level. So the only way for the doctor or nurse to know whether you have a low oxygen level and need oxygen is to measure the oxygen in your blood with a probe on your finger. The probe rests on your finger and does not hurt.

How will oxygen help my body and my condition?

If your blood oxygen level is low, you will benefit from oxygen therapy which should bring your blood oxygen level up to the normal range. If your blood oxygen level is normal, you will probably not benefit from oxygen therapy, even if you feel a little breathless. Giving extra oxygen through a mask or into the nose means that when you breathe in you will receive more oxygen, and this will be carried into your body when you breathe. The oxygen goes from your lungs into the blood stream and is carried to all the cells in your body to use. In other words you are receiving a top up.

How is oxygen prescribed and how will the doctor decide how much oxygen I require?

There are many different types of masks and tubes that hospitals use to provide oxygen and your doctor or nurse will explain the one that has been decided on for you. Some patients breathe oxygen through a face mask and some patients use small nasal tubes into the nose.

Do I need to breathe differently on oxygen?

No, you should breathe normally, and the oxygen will be taken in through your normal breathing pattern. It is best to keep your breathing as relaxed as possible.

How long will I have to stay on oxygen?

Oxygen is usually prescribed for a short duration. However, this will depend on your condition. Oxygen therapy is only a small part of your treatment and every patient's condition will be different. As your blood oxygen level improves, oxygen therapy may be stopped before you have completed all of your other treatments. Regular assessments will be made and oxygen will be reduced and stopped as soon as your condition allows.

Can I adjust my oxygen if I get breathless?

No. Oxygen is a drug and should be used as prescribed. If you feel breathless tell the nurses or physiotherapists or doctors and they will measure your blood oxygen levels and, if you need additional oxygen, they will administer it to you.

BTS Guideline for oxygen use in adults in healthcare and emergency settings Web Appendix 6

Is oxygen the only thing that will make me feel less breathless?

No. There are many ways to treat breathlessness caused by a medical condition. Do not be surprised if your oxygen is weaned down or stopped at a time when you are still experiencing occasional breathlessness. Always tell the nurses or doctors who will reassure you and explain what is happening. They will, if necessary, give you more oxygen or other treatments such as inhalers for your breathlessness.

How is it decided how much oxygen I require?

The health care team will determine how much oxygen you need. The oxygen in your blood can be measured by a probe on the finger as discussed on the previous page. The probe rests on the finger and does not hurt. The amount of oxygen and the type of mask will depend on the results of this test. Occasionally it may be necessary to have a blood test from the wrist or the earlobe.

How often will I need oxygen tests with the finger probe?

Some patient will need continual monitoring and other patients will be monitored a few times a day. This will depend on your personal circumstance.

Can oxygen be harmful to me?

Receiving extra oxygen is not normally harmful but there is no medical benefit from abnormally high blood oxygen levels. We will monitor your levels regularly and adjust the amount according to your needs. Patients with some medical conditions may be especially sensitive to oxygen and the doctors will prescribe lower concentrations of oxygen and monitor blood oxygen levels more closely.

It is important to realise that oxygen can enhance combustion. Care must be taken as this means that anything in the presence of oxygen will burn faster (especially clothes, bedding and other fabrics which can trap oxygen in their fibres). We operate a strict no smoking policy within the hospital.

What happens if my oxygen mask falls off?

Oxygen is only a small part of your treatment and if your oxygen mask temporarily falls off, there should be no immediate harm. However the nurses looking after your care will ensure that it is replaced as soon as possible. You may replace it back over your nose and mouth as you have been advised. Some patients are able to remove the oxygen for periods of time such as meal times but this will be advised by your doctor or nurse.

Is it possible to have too much oxygen?

Yes but it is rare. Some patients with long term lung conditions may have raised levels of carbon dioxide in the blood. These patients may become very sensitive to oxygen, so it is important that oxygen is provided accurately through specialised masks. Your nurse and doctor will let you know if you fall into this category. We aim to provide enough oxygen to do the job but not too much oxygen.

Will I need oxygen at home?

Most patients do not need to go home on oxygen. Only some patients with long term lung conditions or heart conditions may need home oxygen. The health care team will discuss this issue with you if it applies in your case.

If you have any other questions about your oxygen therapy, please ask the nurse, doctor or physiotherapist who is looking after your care. They will answer all of your questions.

May 2017