

Non-Invasive Ventilation

Introduction

The information in this leaflet explains what non-invasive ventilation (NIV) is and when it might be used. It may also answer some of the questions that you may have about NIV.

This leaflet is not meant to replace the consultation between you and your medical team but may help you to understand more about what is discussed. Please do not hesitate to speak to the doctor, nurse or physiotherapist if you have any further questions.

What is NIV?

NIV uses a machine which helps when breathing is a problem. The machine does not breathe for you, but offers gentle help with each breath you take.

NIV is used to support people with some lung conditions, such as Chronic Obstructive Pulmonary Disease (COPD) or where there is a weakness of the chest muscles, such as motor neurone disease.

NIV is used to support your breathing while other treatments, such as antibiotics, nebulisers and steroids, have time to work.

Why do I need NIV to help with my breathing?

Certain lung conditions can at times make breathing hard work and cause your chest muscles to get tired.

When breathing is difficult it can lead to high levels of carbon dioxide in the blood and not enough oxygen. NIV allows your chest muscles to rest while supporting regular breathing to reduce the carbon dioxide levels back to normal.

Before starting NIV you will receive other treatments, including oxygen and nebulisers. NIV will be used if these treatments do not help you to get better.

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Patient Information

NIV can be uncomfortable, so please talk about the treatment and what it involves to decide whether it is right for you. You can choose to stop the treatment at any time in discussion with your doctors.

What is involved with NIV?

A tight mask is fitted to your face which is held in place with straps around your head and connected via tubing to a machine. We will ask you to breathe as normally as possible. With each breath the machine will blow air into your lungs at a set pressure. As you breathe out you will notice a little pressure, which is there to help keep your airways open.

What other treatments might be needed if NIV does not improve things?

Before starting treatment, we will discuss what might happen if the treatment does not succeed. We will speak to you about the chances of success with cardiopulmonary resuscitation (CPR) if your heart was to stop.

We may recommend a decision not to attempt this, completing a 'Do Not Attempt Resuscitation' form if CPR is likely to fail, or lead to an unacceptable quality of life which would be unbearable for you. We may also discuss the options of inserting a breathing tube and the use of a ventilator and a medically induced coma; these treatments may not be the right decision for you.

Are there any side effects?

The most common side effects are:

- Bloating - if air goes into your stomach
- A dry mouth and eyes; the air can be moistened if necessary to help with this
- A drop in your blood pressure; this will be monitored closely to make sure that you do not come to harm
- Sore skin where the masks sits on your face All of these side effects can be helped with padding around the mask and regular mouth care

**Patient
Information**

Are there any alternative treatments?

Your doctors will discuss with you the treatment options before you start treatment with NIV. This treatment is intended to avoid the need for a breathing tube and ventilator in the intensive care unit.

Some people may not wish to try NIV or may wish to stop treatment before it has been effective. If this is the case, then we can make sure that your breathing remains comfortable on and off the machine with the use of medications.

What investigations will I need before starting NIV?

Before starting and while you are receiving NIV we will take blood from your wrist, called an arterial blood gases. This blood sample will be tested to check the oxygen and carbon dioxide levels in your blood allowing us to adjust the machine settings.

How will I be monitored?

You will be looked after in a designated area within the hospital. These areas can be busy and noisy due to monitors and alarms. We will monitor your oxygen levels with a probe on your fingertip and measure your blood pressure and heart rate on a regular basis.

A team of doctors, nurses and physiotherapists will care for you and will be available if you have any problems or questions. You will be able to discuss your treatment with a doctor when you need to and you will be able to remove the mask to make it easier for you to talk at these times.

How long will I need NIV?

Usually NIV is used for 2 to 3 days but this varies from person to person. Sometimes people will need to go home with NIV to use overnight. If this is necessary for you, it will be discussed with you and those important to you.

Patient Information

If NIV is being used, for the first 24 hours you will have the mask on continuously, but will have short breaks to be able to eat, drink and take your medications. You will need some help to get up to use the toilet. You can sleep with the mask on. After the first day and as you start to get better you will be able to have greater amounts of time off the NIV treatment.

Further information

For more information about chronic lung disease and support groups please visit the websites below.

British Lung Foundation

Website: www.blf.org.uk

Breathe Easy Support Groups

Website: www.blf.org.uk/support-for-you/breathe-easy

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