



Tameside and Glossop
Integrated Care
NHS Foundation Trust

Entonox (Adult)

Patient information Leaflet

May 2018

Entonox for Pain Relief

You may already know that Entonox is used to relieve pain and is often used to treat pain during childbirth. It is also used widely by the ambulance service and in hospitals for a variety of painful procedures and conditions.

What Is Entonox?

Entonox is the trade name for the mixture of 50% Oxygen and 50% Nitrous Oxide, also known as 'gas and air'. It is a fairly strong pain killer, and works very quickly to control pain. One of the advantages of this method of analgesia is that it is fully removed by the lungs within a few minutes after the patient has stopped breathing it.

When Might Entonox Be Used?

Entonox is the ideal pain killer for short procedures and other hospital situations that cause discomfort. For example:

- Straightening of broken bones
- Stitching/Suturing wounds
- Removal of drains/ metal work
- Wound dressing changes
- Childbirth
- Siting a drip/taking blood
- Endoscopy procedures
- Investigative procedures where pain relief may be required

Please tell your nurse if you are taking:

- Methotrexate
- Diazepam/Loazepam
- Bleomycin
- Amiodarone
- Antibiotics

As Entonox may interfere with these medicines

How Does Entonox Work?

The exact way Entonox works is still not fully understood. However, it is believed that once it has been inhaled, Entonox travels to the brain and the spinal cord where it stops the pain from being felt.

How Is Entonox Given?

Before you can be given Entonox, the nurse will complete a checklist with you to make sure that it is appropriate for you to use. You may be asked to starve for a few hours prior to your procedure. Your nurse will discuss this with you.

Please tell the nurse if you:

- Have, or have recently had an ear infection, or an operation on your ears
- Have recently been scuba diving
- Are pregnant, or believe you may be pregnant
- Have emphysema, or chronic breathing problems (e.g. chronic bronchitis or asthma).

Entonox is designed to be self administered, and a specially trained nurse or doctor will show you what to do. You will be asked to choose either a mouth piece, which is placed into your mouth or a face mask, which is placed over your nose and mouth. It is important that you hold the mouthpiece firmly between your teeth/lips or if you are

using the mask hold it firmly over your nose and mouth, to form a good seal. You will be asked to breathe deeply, for 1 to 2 minutes before the procedure begins to ensure that the pain killer is in your body. Entonox will only flow when you breathe in, therefore the deeper you breathe, the better your pain relief will be.

What Are The Benefits Of Using Entonox?

Entonox begins to work within 2 minutes, although you may feel some effect after your first few breaths.

Once you have stopped breathing the gas it usually wears off within approximately 2-5 minutes. Entonox has few side effects and many patients throughout the UK have used Entonox without a single serious incident (BOC 2000).

What Are The Risks Of Using Entonox

There is minimal risk involved with the administration of Entonox.

The main concern is that the gas may become trapped in the body – this is **only** a problem if you have specific medical conditions. The nurses will carefully assess you before you have Entonox and **will not** give it if there is **any** risk that this may happen.

Nursing Observations

Prior to using Entonox the nurse will record your blood pressure, pulse and the amount of oxygen in your blood stream (Oxygen saturation) using a special machine. The nurses may continue to monitor your blood pressure, pulse and oxygen saturation every five minutes however this is dependent upon the length of the procedure.

What Are The Side Effects of Using Entonox?

Dizziness

Entonox can cause dizziness however this usually improves, once you stop breathing the gas. If you continue to breathe in Entonox at this point, you may become very sleepy, and would automatically drop the mouth piece/mask and breathe in normal air, which would wake you up again. It is therefore important that you **do not** allow anyone to hold the mask or mouth piece over your nose and mouth or between your lips for you.

Good pain relief is important and some people need more pain relief than others. It is much easier to relieve pain if it is dealt with before it gets bad.

Nausea

Entonox can occasionally cause nausea, but this settles once you have stopped using it.

Most patients find that if they persevere with the side effects identified above and concentrate on breathing slowly, then they quickly become used to these sensations. However if you decide that it does not suit you alternative pain relieving medication will be given instead.

Anaemia

Continuous use of Entonox for longer than 6-8 hours may cause anaemia, vitamin deficiencies and reduce bone marrow function. This is rare and only in extreme circumstances is it a risk to patients.

Document control information

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