

Penthrox for Outpatient Gynaecology Procedures

What is Penthrox?

Penthrox (methoxyflurane) is an inhalation vapour used for the relief of moderate to severe pain in conscious adult patients.

It is widely used by ambulance crews and in Emergency Departments (ED) for trauma cases as an alternative to intravenous analgesia. Off licence it can be used in the outpatient gynaecology setting for procedures where moderate to severe pain would be expected as an additional form of pain relief.

Use of Penthrox in Outpatient Gynaecology setting include;

- Diagnostic hysteroscopy
- Operative hysteroscopy (Novasure / polypectomy / curettage / Myosure)
- Colposcopy
- Pipelle biopsies
- MVA
- Coil insertion/removal

What are the benefits?

Additional pain relief to standard analgesia that is taken 1hr prior to hysteroscopy procedure (Paracetamol and Ibuprofen)

Patient control over level of pain relief taken.

To improve patient experience and complete outpatient procedure thus reducing waiting time for procedures under spinal / general anaesthetic.

Contraindications

There are some contra-indications to the use of Penthrox: some of which are unique to methoxyflurane as a fluorinated anaesthetic, whilst others are more generic but must be considered before a patient is provided with a Penthrox inhaler,

- Allergy to any fluorinated anaesthetic
- History or family history of malignant hyperthermia
- Significant Kidney or liver impairment
- Altered consciousness
- Drug or alcohol use
- Significant cardiovascular conditions

- Ongoing pregnancy
- Recent anaesthetic within 48hours

Are there any side effects?

1 in 10 people may experience the following side effects that are short lasting:

- Cough
- Dizziness
- Headaches
- Nausea
- Taste disturbance
- Drowsiness

1 in 100 people may experience the following uncommon side effects which are also short lasting:

- Skin tingling
- Visual impairment
- Anxiety or depression
- Skin flushing
- Numbness
- Dry mouth
- Inappropriate emotions

Dosage

- One inhaler of Pentrox (3ml) is administered if indicated
- Analgesic effect is achieved within 6-10 inhalations
- Analgesic effects last 25-30 mins with continuous inhalation or 1 hour with intermittent inhalation
- You will be in control of the amount of Pentrox inhaled
- A second 3ml dose can be offered if require (max 2 bottles i.e. 6ml in one day)

On leaving your appointment, after taking Pentrox, it is anticipated that you will leave the department independently as all side effects will have resolved. Please do not leave your appointment if you feel drowsy or dizzy.

Do not drive a car if you experience drowsy or dizzy symptoms

Please note: It is important to inform your medical team if you are requiring further anaesthetic up to 48 hours following the use of Pentrox.

How will I know if I need Pentrox for my procedure?

Pentrox does not replace the need to take **Paracetamol 1gram** and **Ibuprofen 400mgs** (if not contra-indicated) **1 hour prior** to your allocated appointment if required.

Pain experienced is individual for each person and the taking of simple pain killers is all you may require for your procedure. Some people however have a lower tolerance to pain and cannot continue with planned procedures due to this. A discussion will be held with your clinician discussing the procedure, benefits, side effects and pain options available prior to the start of the procedure which will include Pentrox. It can also be administered during the planned procedure if pain is experienced.

What if I do not like how Pentrox makes me feel

Pentrox is self-administered and you will be in control of the amount always inhaled. You can stop inhaling it at any time and the effects of Pentrox wears off very quickly.

How to use Pentrox

1. Ensure the Activated Carbon (AC) Chamber is inserted into the dilutor hole on the top of the PENTHROX inhaler



2. Remove the cap of the bottle by hand. Alternatively, use the base of the PENTHROX inhaler to loosen the cap with a $\frac{1}{2}$ turn. Separate the Inhaler from the bottle and remove the cap by hand.



3. Tilt the PENTHROX inhaler to a 45° angle and pour the total contents of one PENTHROX bottle into the base of the Inhaler whilst rotating.



4. Place wrist loop over patient's wrist. Patient inhales through the mouthpiece of PENTHROX inhaler to obtain analgesia. First few breaths should be gentle and then breathe normally through Inhaler.



5. Patient exhales into the PENTHROX Inhaler. The exhaled vapour passes through the AC chamber to adsorb any exhaled methoxyflurane.



6. Replace cap onto PENTHROX bottle. Place used PENTHROX inhaler and used bottle in sealed plastic bag and dispose of responsibly.



Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough wings (near the lift foyer).

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

Web: www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

Tel: 111

AccessAble

You can download accessibility guides for all our services by searching 'St George's Hospital' on the AccessAble website (www.accessable.co.uk).

The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.



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