



## Great Ormond Street Hospital for Children NHS Trust: Information for Families

# Topical anaesthetics

2<sup>nd</sup> edition

This fact sheet should be read in conjunction with any patient information leaflet provided by the manufacturer.

**This leaflet explains about topical anaesthetics, when and how they are used, and what to expect when your child comes to Great Ormond Street Hospital for treatment.**

## What are topical anaesthetics?

Topical anaesthetics or local anaesthetics are used to numb the skin and reduce pain before a procedure, such as a blood test or having a cannula (thin, plastic tube) inserted. They are very effective at taking away the pain of the procedure but there may still be some discomfort associated with fluid going in during an injection, or pressure on the skin while your child is being held in the right position.

Your child will find your presence reassuring during the procedure. To minimise the discomfort you can help by distracting him or her with toys and games, and by praising your child when the procedure has finished.



## How and when are local anaesthetic creams used?

Local anaesthetics need to be applied to the skin before the procedure. They are kept in place using an adhesive plastic dressing or polythene wrap and a bandage. They need to be covered to allow time for the anaesthetic to be absorbed and effectively numb the skin. The cream should be applied to no more than three areas at the same time. The area can be marked with a pen.

There are two types of local anaesthetic cream that can be used and these are differences between them:

### ***Ametop Gel***<sup>®</sup>

Ametop Gel<sup>®</sup> contains the anaesthetic tetracaine. It is licensed for children over one month of age. It is put in place 30 to 45 minutes beforehand and should not be left on for longer. The site will remain numb for four to six hours. Ametop<sup>®</sup> increases the size of the blood vessels where it has been applied and can cause temporary redness. This is quite common and due to the action of the cream. It should be removed with a tissue before the procedure.



### ***EMLA cream®***

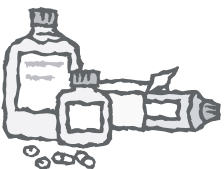
EMLA cream® contains a mixture of two anaesthetics, lidocaine and prilocaine. It is licensed children over one year of age. EMLA cream® should be used at least an hour before the procedure. The site will remain numb for up to two hours. EMLA cream® makes the blood vessels smaller where it has been applied and can cause temporary whiteness of the skin. The cream should be removed with a tissue before the procedure.

### **Are there any side effects to the creams?**

Some people can be allergic to the ingredients, which may cause itching, swelling or bruising where the cream or spray has been applied. Some change in skin colour may occur, but this is normal. Local anaesthetics should not be used on the following areas:

- Wounds, broken skin and eczema.
- Mucous membranes such as inside the mouth or nose.
- The mouth or lips.
- The ears, nose or eyes.
- The anus or genitals.

Some dressings may also cause irritation. In these cases, non-adhesive polythene can be used to keep the cream in place and covered with a bandage. In very rare cases local anaesthetics can cause low blood pressure.



### **Storage of local anaesthetic creams**

- Keep medicines in a safe place where children cannot reach them.
- Store the cream according to the instructions on the patient information leaflet in the box.
- Check the expiry date.

### **Are there any alternatives to the creams?**

Ethyl chloride (Cryogesic®) acts as a local analgesic (pain relief) when sprayed topically onto the skin. It has no anaesthetic properties but rather works as a vapo-coolant. A thin film of liquid is sprayed onto the skin, which makes the skin cold and less sensitive as the liquid evaporates. It works very quickly (in a few seconds) but the effect wears off quickly too as the skin warms up again in a few minutes. It can be very useful for children who are allergic to topical anaesthetics, or for those who get very upset when the cream is applied before tests.

To apply the spray, follow these instructions:

1. Hold the can on its side a few inches above the skin.
2. A fine tube can be attached for more accurate application.
3. Press the nozzle gently and let the fluid drip onto the skin. It will feel very cold and a thin white film will appear.
4. It is easiest to spray a flat, horizontal surface, so if you are spraying your child's tummy, he or she will need to lie back.



5. The needle should then be inserted within 30 seconds of spraying the area.
6. Do not repeatedly spray the same area as this may cause frostbite and pain.

## Use and storage of ethyl chloride spray

- The spray comes in a pressurised container, so do not pierce it or put it on a fire to dispose of it.
- Do not spray near any naked flame or other heat source.
- Use in a well ventilated room.
- Store at room temperature away from direct sunlight or heat

## Using topical anaesthetics or ethyl chloride spray at home

You may be prescribed treatment to be used at home, either for regular treatments that are given at home or in preparation for a hospital visit. You must be sure you know which areas are to be numbed.

## Further information

We also produce an information sheet about helping your child cope with a fear of needles or painful procedures. This is available on our website at [www.gosh.nhs.uk/gosh\\_families/coming\\_to\\_gosh/fear\\_needles.html](http://www.gosh.nhs.uk/gosh_families/coming_to_gosh/fear_needles.html) or by telephoning the Pals Office on 020 7829 7862.

### Notes

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Updated by the Pharmacy department and Child and Family Information Group from an original leaflet produced by the Immunology Department.

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[www.goshfamilies.nhs.uk](http://www.goshfamilies.nhs.uk) [www.childrenfirst.nhs.uk](http://www.childrenfirst.nhs.uk)

