



# Dental treatment with a general anaesthetic

This information sheet from Great Ormond Street Hospital (GOSH) explains what to expect when children and young people have dental treatment with a general anaesthetic and which treatment options might be carried out during the procedure, depending what we find on examination.

## Why do some children and young people have dental examination and treatment with a general anaesthetic?

Some children and young people find it difficult to lie still and keep their mouth open for dental examination and treatment. Others may find dental examination and treatment stressful or upsetting, for instance, if they need to have a lot of teeth removed. If the dentist is unlikely to be able to carry out the dental treatment safely, they may suggest having a general anaesthetic for examination and any treatment required.

## Anaesthetic Pre-Assessment Clinic

Children and young people will need to have a check-up in our Anaesthetic Pre-Assessment Clinic beforehand and might need some tests. Preparing for a planned operation before coming in to hospital avoids delays and reduces the risk of cancellation.

The results of the assessment and tests will be reviewed by one of the anaesthetic team and a plan recommended to the specialty team. For a small group of children, we may recommend discussion by a multidisciplinary team to review the benefits and risks of the procedure – the result of this meeting will be explained by the specialty team.

The appointment is also useful for dealing with apprehension or worry about any aspect of the hospital visit: the play specialists and anaesthetic

team can help prepare children and young people. Usually, on the same day as the anaesthetic assessment, one of the dental team will explain everything, answer any questions and ask for permission by signing a consent form.

## What happens on the day of the dental treatment?

The admission letter will state what time to arrive at GOSH and where to go – this is usually on the day of the procedure, but could be the night before. The dentist will answer any questions and confirm what is planned. If children have any medical problems, please tell the doctors.

It is important that children do not eat or drink anything for a few hours before the anaesthetic. This is called 'fasting' or 'nil by mouth'. Fasting reduces the risk of stomach contents entering the lungs during and after the procedure. The time that children should be 'nil by mouth' will be confirmed by telephone the night before the procedure.

It is equally important to keep giving children food and drink until those times to ensure they remain well-hydrated and get adequate nutrition. This may involve waking them in the night to give them a drink which we recommend.

Some children cannot fast safely so need to come to GOSH the night before to have intravenous fluids.

## What does the dental treatment involve?

Once the child is under anaesthetic, the dentist will carry out their examination. If it has not been possible to have x-rays awake, some will be taken at this point. This will enable the dental team to plan any treatment needed.

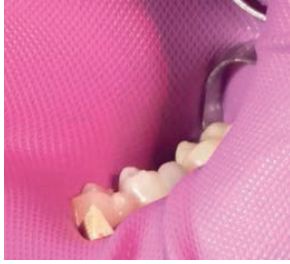
Treatment can include:

### ■ Clean and polish

The dentist uses a 'scaler' to remove any tartar from the teeth and then an electric toothbrush to give the teeth a polish so they feel 'squeaky clean'.

### ■ Rubber dam

Usually, a small sheet of rubber (like a rubber raincoat) is put around the teeth to be treated, which is held in place by metal clips and small wooden/plastic wedges. This keeps the teeth very dry and so the materials used to treat the teeth will all stick well and last longer.



### ■ Fluoride varnish

This is a pale yellow/white gel that is painted onto the teeth. Fluoride varnish gives an extra level of protection against tooth decay.

### ■ Fissure sealant

This is a plastic coating painted into the grooves of the teeth, especially the back teeth (molars). It evens out the surface of the tooth and forms a barrier to stop plaque building up. A special liquid 'etchant' (image a) is applied and then the tooth is washed and dried (image b). The plastic coating is painted on and hardened using a bright light (images c and d). Like fluoride varnish, this is an additional protection against decay but children still need to brush their teeth thoroughly morning and night and limit sugar to mealtimes.



a) The 'etchant'



b) Tooth washed and dried



c) Blue light

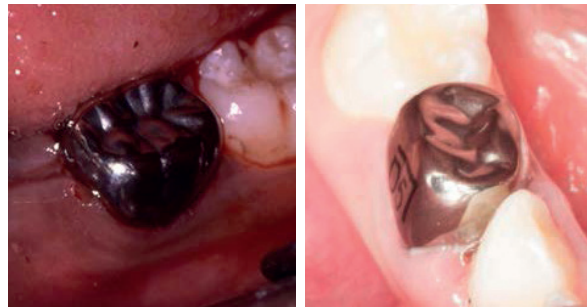


d) Close up of coating

### ■ Fillings and crowns

If decay has occurred, a filling or crown will be needed to stop it getting worse. The decay is removed and white fillings are used where possible. If an adult back tooth (molar) has a very large hole, silver amalgam might be used as it is strong and long lasting.

Sometimes white fillings are not suitable for baby molars (milk teeth at the back) so silver-coloured crowns are fitted. These are chosen from a range of sizes and cemented in place.



### ■ Removal of teeth

Sometimes, a tooth is beyond help, giving pain and could have an infection producing a swelling, so it's best removed. Some local anaesthetic might be given in the area where the tooth is coming out to reduce the soreness afterwards. The tooth is held firmly with a dental instrument and eased out of the socket. Occasionally, if a tooth is 'buried' deeper in the gum, the dentist may need to make a small cut in the gum to enable it to be removed safely.

Once a tooth has been removed, a small piece of special gauze might be put in the hole to help stop the bleeding, which then either dissolves or falls out. Occasionally, dissolving stitches are needed to control bleeding. We will give an information sheet explaining what to do when you get home after a tooth extraction.

## Are there any risks?

After dental treatment, the mouth may feel a bit uncomfortable for a few hours. This is sometimes because the mouth has been wide open for some time so the jaw joint may be a bit uncomfortable. If teeth have been removed, the mouth will feel sore. Painkillers can be used as advised by the dental team or the doctors looking after the child.

It is quite common for there to be some swelling after treatment, but this usually improves in a few hours. Bleeding can be a risk with any form of dental work but is usually minor. Occasionally after a tooth extraction, there is more bleeding, especially if the socket is explored with the tongue or poked. Biting down on a wad of gauze can usually stop the bleeding.

Every anaesthetic carries a risk of complications, but this is usually very small. The anaesthetist is an experienced doctor who is trained to deal with any complications. After the anaesthetic children may be upset, feel dizzy or sick, or have a sore throat. These side effects are usually short-lived.

## Are there any alternatives?

Unfortunately, without treatment dental decay can only get worse – it will not improve without treatment. Tooth decay can be painful and in some cases lead to tooth loss. Infection can develop in the decayed tooth, which can spread to the gums and even the bloodstream in rare circumstances.

## What happens afterwards?

Children will return to the ward after they have recovered from the anaesthetic. They can start eating and drinking as normal once they feel like it.

If local anaesthetic has been used, the mouth may still be a bit numb, so we advise avoiding hot drinks due to the risk of scalding. They should also be careful not to chew or bite the inside of their cheek while it is still numb as this can be painful when the local anaesthetic wears off.

A member of the dental team will come to check the child's progress on the ward and will give some information about what they have done during the procedure.

## Going home

Children will usually be able to go home when they have recovered from the anaesthetic, their vital signs are normal and they have had something to eat and drink.

Call the hospital if:

- the child is in a lot of pain and pain relief medicine does not seem to help
- the child is not drinking any fluids after the first day back home