



Great Ormond Street Hospital for Children NHS Foundation Trust

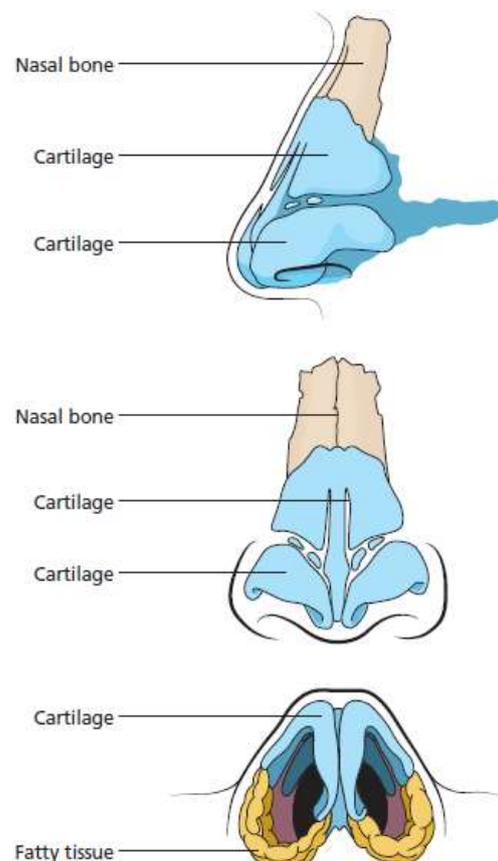
## Open tip rhinoplasty for children with craniofacial disorders: information for families

The bridge of the nose is made of bone but the rest of the nose is a flexible tissue called cartilage. A rhinoplasty is an operation to reshape the bone and cartilage in the nose. An open tip rhinoplasty is one where incisions are made to access inside the nostrils. Nose re-shaping is common in children with craniofacial conditions as their nose may be 'beaked' or skewed to one side. Some children may have a bifid (split) nose. This information sheet from Great Ormond Street Hospital (GOSH) explains the open tip rhinoplasty operation for children with craniofacial disorders. It explains how to prepare your child for surgery as well as what to expect in hospital afterwards.

Children with the following conditions may benefit functionally from this operation:

- Cranio-fronto-nasal dysplasia
- Freeman Sheldon syndrome
- Fronto-nasal dysplasia
- Midfacial cleft
- Apert syndrome
- Crouzon syndrome
- Pfeiffer syndrome
- Saethre-Chotzen syndrome
- Unicoronal craniosynostosis

It may be the only form of treatment needed or it may be just one of a series of operations carried out throughout childhood and adolescence.



## Getting ready for the operation

### Pre-admission clinic

Preparing for a planned operation, test or procedure before coming in to hospital avoids delays and reduces the risk of cancellation. The results of any tests and investigations are available in plenty of time and can also be re-checked if they are not within the normal range. Your child may need various blood tests before the operation – this depends on your child's medical condition and the nature of the surgery that is planned.

The doctors and/or nurses will meet you and your child to take down their medical history and any other information needed before your child is admitted to hospital. The nurses will explain about any care your child will need before and after the operation. If your child has any medical problems, particularly allergies, please tell the doctors about these. Please also bring in any medicines your child is currently taking.

You may be seen by one of the team carrying out your child's operation and be asked to give permission for the procedure by signing a consent form. If you give your consent at the pre-admission appointment, you will need to confirm that you still agree to the procedure on the day of admission.

One of the team will explain about the types of anaesthesia that are used at the hospital, and also about options for pain relief after the operation, test or procedure. If there are any questions or concerns about your child's anaesthesia, an anaesthetist may come to see your child in the pre-admission clinic.

### The night before surgery

You will be asked to give your child a bath or shower and hair wash before surgery.

It is important that your child does not eat or drink anything for a few hours before the operation. This is called 'fasting' or 'nil by mouth'. Fasting reduces the risk of stomach contents entering the lungs during and after the procedure.

You will be informed the night before the procedure of the time that your child should be 'nil by mouth' – in other words, have nothing to eat or drink before the anaesthetic.

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

### On the day of surgery

Please come to Woodpecker Ward at the time stated in your admission letter. One of the nurses will check that your child is well enough for the operation, complete some paperwork with you and take some baseline observations of their temperature, heart rate and breathing. They will also put an identification wristband on your child. Older children and young people may need to wear anti-embolism stockings during and after the operation to reduce the risk of blood clots forming.

If you did not give your consent for the operation at the pre-admission appointment, a member of the surgical team will visit you to explain about the operation and ask you to sign a consent form.

### Important

The person bringing your child for the operation should have 'Parental Responsibility' for them. Parental Responsibility refers to the individual who has legal rights, responsibilities, duties, power and authority to make decisions for a child. If the person bringing your child does not have Parental Responsibility, we may have to cancel the operation.

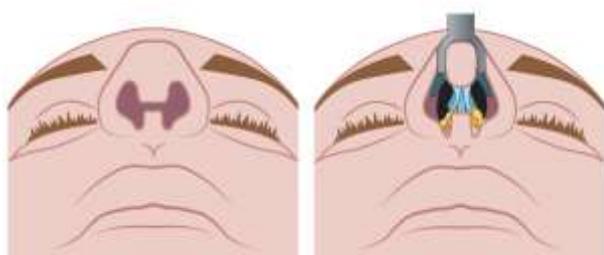
All children are seen by the anaesthetist on the day of the operation.

## What anaesthetic is given?

Your child will be given a general anaesthetic by an anaesthetist who specialises in giving anaesthetics to babies and children. Both parents will be able to go with your child to the anaesthetic room and stay until they are asleep. This usually involves your child breathing some anaesthetic gas. Later, a tube is passed into the airway (trachea) to safeguard breathing. A cannula (thin, plastic tube) is put in a vein and usually left in place for a short time after the operation. Fluids can be given to your child through this tube during the operation and afterwards if necessary.

## What does the operation involve?

Open tip rhinoplasty is carried out while your child is under general anaesthetic. The surgeon will make an incision in the skin over the cartilage between the nostrils as well as a small cut inside each nostril. They will then pull the skin upwards to expose the cartilage and nasal bone.



If the bridge of the nose is wide, the surgeon will gradually reshape the nasal bone to make it narrower. Occasionally a bone graft is needed to preserve the nasal bridge. The cartilage is also reshaped to give a more normal shape, again grafting cartilage from the nose or elsewhere if needed. If needed, the nostrils can be narrowed using stitches.

The skin is then closed and held in place with stitches – these may be dissolvable or may need to be removed at a later date. The surgeon may

put a plastic cast over the bony part of the nose to protect it while it heals.

Your child will then be taken to the Recovery area to start to wake from the anaesthetic.

## Are there any risks?

Healthy children usually cope well with the anaesthetic, but the risk increases if your child has other problems.

All surgery carries a small risk of infection or bleeding. To reduce the risk of infection, your child will be given an initial dose of antibiotics during the operation. They may continue to take antibiotics by mouth for a few days afterwards.

There is a small chance of bleeding during or after the operation. It is important that your child leaves their nose to heal without fiddling or picking it or blowing, sneezing or sniffing their nose violently as this could increase the risk of bleeding.

Your child's face will look swollen and bruised after the operation. This particularly affects the eyes following a rhinoplasty and the nurses will clean them carefully following the operation. Swelling tends to get worse for the first two to three days and then start to improve.

Your child has to breathe through their mouth for a while after the operation due to the swelling in and around the nose. This may be difficult for some children, particularly at night, but will improve over the next few weeks as the swelling improves.

Some children have reported that their sense of smell is different to before the operation. This is due to the tissues and olfactory cells which enable us to smell being disturbed during the operation. For most children, this will improve gradually in the weeks and months after the operation.

The tip of the nose and the area around it may feel a bit numb for a while after the operation but

this will gradually improve. The incision site in between the nostrils will start to heal and will eventually fade until it can hardly be seen.

## **Are there any alternatives?**

No, a rhinoplasty operation is the only way to reshape the nose effectively.

## **What happens afterwards?**

Once your child has started to recover from the anaesthetic, they will be brought back to a surgical ward to continue recovering. At the end of the day, the doctors will visit you to talk about the operation.

The nurses will carry out regular observations of your child's breathing, heart rate and temperature throughout the rest of the day and night.

Your child may feel sick after the operation, but the doctors will give them medicines to reduce this. The sickness should pass within a couple of days. If the inside of their nose is oozing a little after the operation, this could pass down the back of the nose to the mouth and throat making them feel sick. If they are sick, they may pass a few blood spots. There may also be a few blood spots in their phlegm and mucus. This is a normal reaction to nose surgery and rarely a concern.

Your child will be able to start eating and drinking as soon as they feel like it. They may need to eat and drink slowly to start with as they will be breathing through their mouth.

The nurses will also assess your child's pain and give them regular pain relief for the first few days – intravenously to start with and then by mouth when they are eating and drinking. The intravenous infusion of antibiotics will continue for the first 24 hours.

Your child's eyes will be very swollen after the operation so the nurses may clean them gently to make them more comfortable. Your child should sit and lie in as upright position as possible to

reduce any swelling. The swelling is temporary and will start to improve in a few days.

## **Going home**

Most children go home after staying overnight on the ward. When you get home, your child should avoid any rough and tumble play or contact sports for several weeks after the operation. If your child enjoys a particular sport, please discuss this with your surgeon.

Your child should also avoid leaning forwards and blowing their nose or sniffing violently. This will improve any swelling and reduce the chance of any bleeding from the operation site.

If your child wears glasses normally, they may have to do without them while their nose heals as the pressure on the bridge of their nose could affect how the bone heals. If they cannot do without their glasses, they may have to tape them to their forehead to avoid this pressure for a few weeks. The team will discuss this with you further.

## **Follow up appointment**

Your child will have a follow up appointment after the operation – we will give you details before you go home.

## **What is the outlook for children who have had an open tip rhinoplasty?**

The outlook for children is good with most parents and children happy with the end result once the swelling has reduced after a period of weeks. Normal day to day life will only be limited as your child heals and can return to normal after the follow up appointment after the operation.

**If you have any questions, please telephone the Craniofacial Clinical Nurse Specialists on 07768 526 449 (Monday to Thursday from 9am to 5pm). Out of hours, call Koala Ward on 020 7829 8826. You can also seek medical advice out of hours by telephoning the GOSH switchboard on 020 7405 9200 and asking them to page the craniofacial doctor on call.**