### Rhinoplasty

Rhinoplasty, or nasal surgery, is designed to improve the appearance of the nose. It may be carried out because the nose appears either flat or asymmetrical. Ear cartilage is used to build up the flat nose. This surgery is carried out upon the recommendation of the surgeon and can take place anytime from just prior to your child attending school right up into his/her teenage years. Early repair may not prove sufficient as the shape of the nose changes constantly throughout the teenage years requiring further intervention. For this reason you may find the surgeon reluctant to recommend such early nasal surgery. Indeed this surgery is often left until the age of 16-18 years.

### Summary

So, the plastic surgeon that began the repair work when the child was three months old finally discharges him/her at the age of 18–20 years. This is why it makes sense to have a co-ordinated team to ensure that all the recall appointments are made for the proper time of treatment and that nothing is left to chance.

### Hospitalisation



Hospitalisation and surgery are ongoing for a child with cleft lip and palate. Any anxieties you or your child may have about going into hospital can be reduced by adequate preparation in advance, e.g. contact

the cleft co-ordinator regarding the admission, discuss the procedure in advance, check in advance on hospital facilities.

Explain to your child what is happening in language appropriate to their age. Pack some comforts from home such as favourite toys, books etc. Children's hospitals usually have good information on what to bring with you (usually available from Admissions dept).

Parents can spend time with their child in hospital so that the child can be reassured and comforted. Don't forget to plan your own packing. If you are staying overnight in hospital check how the hospital facilitates parents – you may need to bring a sleeping bag for example. Lastly, there is likely to be a lot of people that are anxious to know how your little one is getting on; work out in advance what the best way is of keeping people informed without putting yourself under pressure.



### TITLES IN THE SERIES:

- 1. About the Cleft Lip and Palate Association of Ireland
- 2. What is Cleft Lip and Palate?
- 3. Questions and Answers for New Parents
- 4. Feeding Issues for New Parents
- 5. Speech and Hearing Concerns
- 6. The Genetics of Cleft Lip and Palate
- 7. Dental Health and Treatment
- 8. Surgical Treatment for Cleft Lip and Palate
- 9. Social and Psychological Aspects
- 10. Handout for Teachers and Carers

Leaflets are available by post from the Association or can be downloaded from **www.cleft.ie**.

#### ACKNOWLEDGEMENT:

The Association would like to thank the members of the cleft treatment teams and other health professionals for their valuable contributions.

See www.cleft.ie for the full acknowledgement and list of contributors.

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### Surgical Treatment for

# Cleft Lip and Palate



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# Surgical Treatment of Cleft Lip & Palate



The treatment of cleft lip and palate involves a group of specialists who adopt a team approach in the management of cleft treatment.

The cleft multi-disciplinary team includes

- ➤ Cleft co-ordinator
- ➤ Plastic surgeon
- > Speech Language therapist
- ➤ ENT (Ear Nose Throat) surgeon
- ➤ Orthodontist
- ➤ Maxillofacial surgeon (specialises in upper jaw & face)

And may also include the services of

- ➤ Paediatric dentist
- ➤ Social worker
- ➤ Geneticist
- ➤ Psychologist
- ➤ Dental Hygienist
- ➤ Prosthodontist (aesthetic denistry)

Surgical repair starts as early as the child's third month with lip repair. Palate repair usually takes place before the child's first birthday. Further procedures may entail lip revision, pharyngoplasty, bone grafting, orthognathic surgery, and /or rhinoplasty. The patient will remain in the care of the cleft team until his/her face is fully grown (late teens).

It is important for you to know that the members of the cleft team are dedicated towards giving your child the best treatment possible. You as the parents or guardians will be involved with the team throughout the process, and your role and valued input are central to your child's adaptation and healthy development.

# Pain Relief & 1st Feed Post Surgery

Clinically effective combinations of medication, based on medical history, are used to ensure your child experiences the minimum of discomfort following surgery. Intravenous fluids are given during and after the operation. As your child is well hydrated he/she may not be interested in recommencing feeds. However, once your child shows an interest bottle feeding is usually recommenced. Often your child may only wish to take a small amount as a "comfort" and go back to sleep.

## Cleft Lip Repair

Lip repair is carried out at around 3 to 4 months under full anaesthetic. The whole emphasis is on muscle repair in order to mould the distorted premaxilla (underlying bone) back into place. The repair involves making incisions and bringing the pieces of lip together to form a full lip. Following the procedure, your child will need pain relief to minimise the discomfort felt. The aim following any procedure is to ensure normal feeding resumes quickly which in turn aids a full recovery. The stitches will be removed after approximately one week, again under general anaesthetic.

## Cleft Palate Repair

Palate repair is carried out between 6 and 12 months of age and likewise is carried out under full anaesthetic. The surgery involves making a number of incisions in the palate and using the tissue and muscle present to close the cleft in three layers, namely the roof of the mouth, the floor of the nose and the muscle in between. In about 10% of palate repairs the centre of the repair does not heal, leaving a hole (fistula) through which there may be excess leakage. This hole usually needs to be closed surgically at a later stage (between 3 and 10 years of age).

### Pharyngoplasty

This procedure involves repositioning some of the tissue from the palate and the back of the throat so as to prevent air escaping through the nose, the escape giving rise to nasal speech. This escape of excess air is referred to as Velapharyngeal incompetence (VPI). This procedure is required in approximately 10–20% of all palate repairs, with most patients being 5 years or older. VPI cannot be corrected by speech therapy alone.

## Surgery for Hearing



Problems with middle ear drainage, leading to ear infections, can be easily and effectively corrected with the insertion of grommets into the ear drums. The problem most commonly arises in your child's earlier years. An ear, nose and throat surgeon carries out this procedure. Treatment involves day case surgery, the administration of a general anaesthetic, and the draining of fluid with the insertion of the grommet. The grommet may last 6–9 months after which point they usually expel naturally. Grommets may need insertion on more than one occasion until such time as your child's eustachian tubes start to work properly.

### **Alveolar Bone Grafting**

Alveolar bone grafting is the replacing of missing bone in the front and roof of the mouth. This procedure is carried out when the second, or permanent, teeth are beginning to erupt, which is usually at around 9 to 11 years of age. The orthodontist determines the timing while either a maxillofacial surgeon or plastic surgeon carries out the procedure. The bone graft ensures that teeth have a stable support to erupt through. The bone for the graft is taken from the iliac crest (the top of the hip).

A lip revision can sometimes be carried out at the same time as the bone graft if the initial lip repair is deemed to be some way unsatisfactory.

### **Orthognathic Surgery**

In a significant number of cases an osteotomy (bone cut) to correct a misalignment of the dental arches is necessary and this surgery is carried out at about 18 years of age. The surgery is referred to as orthognathic surgery, and involves moving forward the whole of the upper jaw, or moving the mandible (lower jaw). In the majority of cases this surgery gives very good results.

About 25% - 30% of children with a cleft lip and palate will receive orthognathic surgery.

