

Information leaflet for children

Your Alveolar Bone Graft Operation



Introduction

This leaflet gives you a bit of information about what an alveolar bone graft is and why you may need one.

What is an alveolar bone graft?

The Alveolar Ridge is the arch of bone under your gums where your teeth grow. Some children who have a cleft, have a gap in the bone under their gums in the top jaw. This gap was not closed at the operation when they were a baby because it can affect growth of the face. This gap can be repaired with an operation when you are about 8-12 years old. This is done by borrowing bone from your hip and putting it in the gap under the gum. This operation is called an alveolar bone graft. Lots of children with clefts have this operation.



1) Gap under the gum



2) Gap filled with grafted bone



3) Tooth grown into grafted bone

Why do I need a bone graft?

If you have a gap in the bone, food and drinks can leak into your nose from your mouth. Air can also leak through this hole and can affect your speech. The alveolar bone graft helps to repair the gap in the bone.

An alveolar bone graft can also help the teeth to grow in the right place. Adult teeth need bone to be able to grow through into your mouth

Is there any other treatment I could have instead?

A bone graft is the best treatment to repair the gap in the bone under your gum. This operation is important to repair the bone and let the adult teeth grow into place. Without the bone, it is hard to move teeth into the right place as they may become loose and can be damaged.

Is there anything needed before the operation?

You may need a brace before your bone graft to move your teeth into a better position, and to help make surgery easier. The brace is put on by an orthodontist—a dentist who specialises in straightening teeth.



If braces are needed it often takes about 6 months before you can have the operation. The brace treatment is to make it easier to do the surgery but also to improve your bite. The picture on the left shows a type of brace that is often used first called a 'quadhelix'. Then



a 'transpalatal arch' brace is fitted afterwards to keep your teeth straight. This is shown on the right.

Before the bone graft operation

Before your operation you will have some x-rays taken. This is so the surgeon can plan your treatment.

You must also be good at brushing your teeth, so after the operation you can keep your mouth really clean. This will help your mouth get better more quickly after the operation. A dentist may want to check you can brush your teeth well and help show you the best way to do this.

Nearer the time of your operation you will need a preadmission appointment where nurses will explain things in more detail about what to expect when you come to hospital for the operation and ask about your general health.

What does the operation involve?

Your operation will be done here at the Children's Hospital. During the operation a small amount of bone is taken from your hip bone through a small cut on the skin. The bone from your hip will regrow in a few weeks but you will have a small scar left on the skin.

The small pieces of bone from your hip are then used to fill the gap under your gum. This should help to stop any leaking from your nose.

Sometimes baby teeth which are remaining in the cleft site may also need to be removed during the operation to allow the adult teeth to grow down.

What are the risks of treatment?

There is a small risk the bone graft will not work. If this happens it may need to be repeated.

Very rarely, the gap can reopen, which would need to be repaired in a second operation.

After the operation

You will be able to walk and eat and drink after the operation. Your face may be a little bit swollen but it will get better in a few days. The stitches in the mouth will dissolve away in about 3 weeks.

Normal painkillers may be needed afterwards as it can be a little sore. You will also notice a plastic tube (catheter) coming out from your scar in your hip. This is used to give some medicine to help with pain in your hip. A dressing will stay on your hip for a few weeks afterwards as well.

You will need to stay one night in hospital after the operation. Your parent or guardian will be able to stay with you on the ward if you would like them to when you are in hospital.

What happens when I go home?

You will need to eat soft food until your mouth has healed. Food like crusty bread, crisps and crunchy apples should be avoided.

You need to keep your mouth very clean. A soft toothbrush can be used to gently brush your teeth. A special mouthwash will be given to you to use as well.

We recommend that you take 1 week off school afterwards and avoid contact sports or swimming for 2 weeks so everything will heal properly.

You will also need to take a course of antibiotics for 5-7 days to prevent an infection.

Parent or guardian - Things to look out for

You should call the maxillofacial surgery department if:

- your child is in pain and pain relief does not seem to help.
- Your child shows any signs of infection – either the leg, hip

- or mouth is red, sore or oozing.
- Your child has a high temperature and paracetamol does not bring it down.
- Your child is not eating or drinking.

What happens later when my mouth has healed?

You will need to come back to our department 2 weeks after the operation. We will check the inside of your mouth and the scar on your hip to make sure it is healing well.

You will then have another appointment 6 months after the operation. A new x-ray will be taken at this appointment to check the bone graft has been a success as well as helping to decide when to start orthodontic treatment to straighten your teeth if you want to.

Further information

We hope this leaflet will help you to understand about alveolar bone grafts. If you or your family want to find out more about this or if you need any other information or have any more questions, please speak to the dental team caring for you.

Maxillofacial department: 0121 333 9352

Maxillofacial Secretary: 0121 333 8078

Looking after and sharing information about your child

We have a duty of care to help patients and families understand how information about them is kept and shared and we include the following information in all our patient leaflets:

Information is collected about patients relevant to their diagnosis, treatment and care. We store it in written records and electronically on computer. As a necessary part of that care and treatment we may have to share some patient information with other people and organisations who are either responsible or directly involved in the patient's care. This may involve taking the patient's information off site. We may also have to share some information for other purposes; such as research etc. Any information that is shared in this way will not identify the patient unless we have the patient's and parent's/carer's consent. If you have any questions and/or do not want us to share that information with others, please talk to the people looking after your child or contact PALS (Patient Advice and Liaison Service) on 0121 333 8403.

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