

Alveolar Bone Grafting

What is alveolar bone grafting?

A child with a cleft palate may need surgery after the first cleft palate repair to replace missing bone in the front and the roof of the mouth. The alveolus is the bony part of the upper jaw and lower jaw that contains the teeth. Placing bone in this area is called alveolar cleft bone grafting. This involves taking a small amount of bone from one place (most often the hip) and placing it in the area of the cleft near the teeth. This gives the teeth, which may not have come in yet, a stable support to come through. There is also added support and an improved contour if a bridge is needed to fill in missing teeth.

Before surgery

The best results of alveolar bone grafting are done by widening the upper jaw before the graft is placed. This most often makes the hole bigger, but gives better access for the surgeon. The widening of the upper jaw is most often done using fixed orthodontic braces or a palate expander. Most often this brace is a quadhelix. These are used for about 6-9 months before bone grafting.

What to expect after surgery

- There will be stitches (sutures) on the inside of your child's mouth. You will not be able to see them from the outside.
- You can expect swelling of the lips and cheeks and maybe some bruising. This is normal. Most of the swelling should go away over the first 7 to 14 days.
- Most often, your child will be in the hospital overnight. This will depend on your child's recovery.

Pain

- By the time your child is ready to go home, pain should be controlled with

pain pills such as Tylenol® with codeine or Tylenol® alone.

- For the first 7-10 days, the site from which the bone was taken will be sore. Your child shouldn't do any hard activity.

Wound Care

- The mouth should be kept very clean during the first 10 to 14 days to make sure the results are good. Careful tooth brushing with a baby toothbrush and washing the mouth often with a special mouthwash are needed. This mouthwash may be prescribed. It should be used after eating and before going to bed. You also may use saltwater as a mouth rinse. Good oral hygiene is vital after the bone grafting. When the bone is moved into the cleft it has to build a new blood supply. During this time, it is at risk for infection.
- Your child will be placed on antibiotics during and after surgery to prevent infection.

Diet

- Your child will be on a soft diet for a few weeks.
- After eating, rinse the inside of the mouth out with water or mouthwash.
- Do not use straws or eat foods served on a stick.

The Healing Process

- It is very important that you practice good oral hygiene while healing.
- This phase will begin about 4 to 8 weeks after surgery.
- Your child's orthodontist will be able to make minor changes to ensure that your child's new bite and teeth are aligned. It most often takes 3 to 12 months before

your child's orthodontic appliances are removed.

Follow-up

Your child will have a clinic visit about 1 week after going home.

When to Call the Doctor

If you have any questions or concerns about your child or if your child has:

- Bleeding from the incision
- Signs of infection which may include, increased warmth, swelling, and redness at the incision site or pus-like drainage
- Temperature greater than 101.5° F for two readings taken 4 hours apart

- Severe or increasing pain not relieved by medicine and rest.
- Vomiting that doesn't stop

Phone Numbers

AFCH Pediatric Specialty Clinic, weekdays, 8 am to 5 pm **(608) 263-6420 option 4**

After hours, weekends and holidays, the clinic number is answered by the paging operator. Ask for the plastic surgery resident on call. Leave your name and phone number with the area code. The doctor will call you back.

If you live out of the area, call toll-free **1-800-323-8942**.