

Alveolar Cleft Bone Grafting Information & Instructions

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We believe parents and guardians can contribute to the success of this surgery and invite you to participate. Please read the following information to learn about the surgery and how you can help.

General Information

- An alveolar bone graft is a surgery to add bone to the gum ridge in a child who was born with both a cleft lip and a cleft palate.
- The alveolar bone graft is done several years after the child's first cleft lip and cleft palate repairs.
- The timing of the alveolar bone graft is very important because it is often done as the child begins losing his or her baby teeth, before the permanent teeth come in.
- Because every child is different, the best age at which to do the alveolar bone graft will be different for every child. Most children who have an alveolar bone graft are between 7 and 9 years old.
- Your child's alveolar bone graft surgery will be done under general anesthesia, which means that he or she will be sound asleep during the surgery and will have no memory of it.
- When general anesthesia is needed, there are important rules for eating and drinking that must be followed in the hours before the surgery.
- This surgery usually takes between 2 to 4 hours, depending on the type and size of graft your child needs.
- Your child will stay overnight for at least 1 day after the surgery.

What is an Alveolar Cleft?

- Some children who are born with both a cleft lip and a cleft palate also have a problem with the alveolar bone, which makes up the gum ridge or front portion of the roof of the mouth. The alveolar bone is a thin layer of bone that forms the sockets around the roots of the upper teeth under the gum tissue.
- When there is a cleft in the alveolar bone, it can mean there is a fistula or hole from the mouth to the nose. This cleft in the bone and gums prevents teeth from growing properly and the floor of the nose from developing normally. Fixing the cleft to allow for proper tooth development and is important to a child's health because missing teeth can have a negative effect on eating, digestion, facial growth and appearance. In addition, a child's smile is an important part of his or her personality, and missing or poorly aligned teeth can have a negative impact on a child's self-esteem.
- The alveolar bone graft repairs the hole in the gum ridge and stabilizes the bone arch, providing better support for the base of the nose and new bone for the roots of

the developing teeth to grow into. The surgery usually is done when the child's permanent canine teeth are three-quarters formed.

- To do the bone graft, a piece of bone usually will be taken from your child's iliac crest (the upper ridge of the hip bone). The doctor will make a 1- to 3-inch incision in the skin just over the hip bone and in the bone itself to remove the inner portion of the bone. This part of the bone, called cancellous bone, is soft and pasty and can be shaped to form the patch that will close the hole in the alveolar bone. Gum tissue inside your child's mouth then will be closed around the bone and sutures or stitches will hold the tissue in place as it heals.

Home Preparation



- When general anesthesia is needed, there are important rules for eating and drinking that must be followed in the hours before the surgery. One business day before your child's surgery, you will receive a phone call from a nurse. Please have paper and a pen ready to write down these important instructions. If these instructions are not followed exactly, it is likely your child's surgery will be cancelled.
- The nurse will give you specific eating and drinking instructions for your child based on your child's age. The following are general guidelines:
 - No matter what age your child is, you should follow the specific instructions given to you on the phone by the nurse.
 - After midnight the night before the surgery, do not give any solid food or non-clear liquids. That includes no milk, juices with pulp, and chewing gum or candy.
 - If the nurse says it is okay, clear liquids can be given up to 2 hours before the scheduled arrival time. Clear liquids include water, Pedialyte, Kool-Aid, apple or white grape juice.
 - In the 2 hours before the scheduled arrival time, give nothing to eat or drink.
 - You should bring a long-sleeve T-shirt, slightly larger than your child's usual size, to the hospital on the day of surgery. It will help make your child more comfortable on the day you take your child home from the hospital.

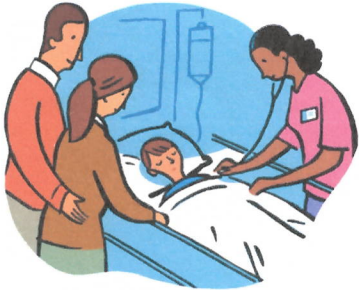
After Surgery

- Your child will have sutures (stitches) in the roof of his or her mouth. These sutures are all "dissolvable," meaning that they do not need to be removed. As the gums inside the mouth heal, the parts of the sutures under the gums will dissolve on their own.
- Your child also will have a bandage and sutures on his or her hip where bone for the graft was taken out. Showers are allowed with the bandage, but no baths. The outer bandage can be removed in 7-10 days. Underneath is an inner bandage that will fall off on its own. The sutures are also dissolvable.
- Some children may receive a special kind of retainer called a "splint" to keep the teeth stable as the bone graft heals. If your child gets a splint, arrangements will be made for its removal - generally 2-4 weeks following surgery.
- Your child may complain of a dull ache at the site of the hip incision. This ache is normal and can be controlled with pain medication.
- Your child can be given pain medication every 4 to 6 hours, as needed, when he or she wakes up.
- When your child is alert, he or she will be moved to a hospital room so the nursing staff can continue his or her care. If you need help, the nurse will show you how to

feed your child and take care of the surgical sites so that you will be comfortable caring for your child at home.

Going Home

After the surgery, and for the weeks afterward at home, your child will only be allowed to drink liquids or semi-liquids from a cup. No utensils or straws should be used until your child's surgeon says it is OK.



- Within the first 24 hours after the surgery, while your child is still in the hospital, he or she will be allowed to drink clear liquids from a bottle or cup.
- Your child will stay in the hospital until he or she is drinking well and urinating normally.
- When your child is drinking well, the IV will be removed by a nurse before you leave the hospital.
- Rarely some children will need to stay for more than 1 day if they are not drinking and urinating normally
- Your child will be given liquid Tylenol with Codeine or liquid Morphine for pain. Over-the-counter liquid Ibuprofen can be combined with the pain medications. Most children will only need over-the-counter Tylenol when they get home. **DO NOT give your child any over-the-counter Tylenol if there are still on Tylenol with Codeine.**
- Your child will be given an antibiotic to take for about a week after surgery.
- Your child will also be given an antibiotic mouth rinse called Peridex that can be used very gently.

At Home Care

If you notice any of the following changes in your child, call the surgeon right away:

- Fever higher than 101.4°F
- Trouble breathing or skin color changes (pale, blue or gray)
- Bleeding or foul-smelling drainage from the scar
- Signs of dehydration, including lack of energy, sunken eyes, dry mouth or not urinating enough/fewer wet diapers
- Any redness, swelling



- Your child can drink any kind of liquid once he or she gets home. Your child may also eat any kind of food that can be watered down and poured from a cup or bottle, including yogurt, pudding, milkshakes, or anything that you can grind in a blender to be as smooth as baby food. Remember, though—**no utensils or straws!**
- After drinking any milk products, have your child drink clear water to wash out the mouth and prevent the buildup of milk along the incision.
- Your child will be allowed to shower once he or she goes home. Usually there is a clear plastic dressing placed on the hip dressing/bandage—leave this water-tight barrier in place and your child may shower regularly.
- When your child's mouth has fully healed, usually about 6 weeks after surgery, he or she will be ready to resume orthodontic treatment to prepare for his or her permanent teeth to come in. Once the canine teeth have come in, the orthodontist can put on braces to guide the teeth into their proper position.
- Your child should not participate in any strenuous physical activity for 1 week after surgery. Your child's doctor will tell you when your child may resume contact sports, usually 4 to 6 weeks after surgery.