

CLEFT PALATE REPAIR

AT CHILDREN'S HOSPITAL OF PITTSBURGH OF UPMC, 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.

Fast Facts About Cleft Palate Repair

- Cleft palate repair is a surgery to fix a cleft, or hole, in the palate, or the roof of the mouth.
- Your child's cleft palate surgery will be done under general anesthesia (*an-es-THEEZ-ya*), which means that he or she will be sound asleep during the surgery.
- 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 6 hours, depending on the type of cleft palate repair your child needs.
- Your child will stay overnight for at least 1 day after the surgery.

What Is Cleft Palate and Cleft Palate Repair?

Cleft palate is a hole in the roof of the mouth that is present at birth. Early in the development of the baby inside the mother, the left and right sides of the face and the roof of the mouth join together or "fuse." Sometimes the two sides do not fuse correctly, leaving an opening, or cleft, in the palate. A cleft palate does not mean that the palate is missing, although sometimes it may look that way.

The roof of the mouth is made up of the hard palate in the front, which is made of bone, and the soft palate in the back, which is made up of soft tissue and muscle. When the cleft is in just the back of the soft palate, it is called an incomplete cleft palate. When the cleft runs the length of the palate from the soft palate to just behind the teeth and gums, it is called a complete cleft palate. Because the lip and palate develop separately, it is possible for a child to have only a cleft lip, only a cleft palate, or both a cleft lip and cleft palate.

Left untreated, a child born with a cleft palate will face problems with feeding, growth, development, ear infections, hearing and, most significantly, speech development. It is important to correct the cleft early in a child's life, usually between 6 and 18 months of age, but sometimes later.

Cleft palate surgery will repair the palate, with the goal of achieving understandable speech. Occasionally, more than one surgery may be needed to completely close the opening in the roof of the mouth or to change the palate to achieve more normal speech. Virtually every child born with a cleft palate is able to lead a healthy, happy life once the cleft has been repaired.



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 between the hours of 1 and 9 p.m. (Nurses do not make these calls on weekends or holidays.) 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. Following are the **usual** instructions given for eating and drinking. No matter what age your child is, you should follow the specific instructions given to you on the phone by the nurse.

For children older than 12 months:

- After midnight the night before the surgery, do not give any solid food or non-clear liquids. That includes milk, formula, juices with pulp, and chewing gum or candy.

For infants under 12 months:

- Up to 6 hours before the **scheduled arrival time**, formula-fed babies may be given formula.
- Up to 4 hours before the **scheduled arrival time**, breastfed babies may nurse.

For all children:

- Up to 2 hours before the **scheduled arrival time**, give only clear liquids. Clear liquids include water, Pedialyte®, Kool-

CLEFT PALATE REPAIR cont'd

Aid® and juices you can see through, such as apple or white grape juice.

- In the 2 hours before the **scheduled arrival time**, give nothing to eat or drink.
- You may bring along a “comfort” item—such as a favorite stuffed animal or “blankie”—for your child to hold during the surgery.
- 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.

The Surgery

Your child’s cleft palate repair will be done at the Same Day Surgery Center of Children’s Hospital of Pittsburgh of UPMC. When you have checked in at the Same Day Surgery Center, you and your child will be called to an examination room where your child’s health history will be taken and vital signs will be checked.

You will meet with one of the doctors on your child’s surgical team to go over the surgery. He or she will answer any last-minute questions you might have at this time. A member of the anesthesia staff also will meet with you and your child to review his or her medical information and decide which kind of sleep medication he or she should get. As the parent or legal guardian, you will be asked to sign a consent form before the anesthesia is given.

When it is time for your child to go the operating room, you will be asked to wait in the surgical family waiting area.

- If your child is very scared or upset, the doctor may give a special medication to help him or her relax. This medication is flavored and takes effect in 10 to 15 minutes.
- If relaxation medicine is needed, you may stay with your child as he or she becomes drowsy; then you will be asked to wait in the surgical waiting area when your child is ready to move to the operating room.
- Young children get their sleep medication through a “space mask” that will carry air mixed with medication. Your child may choose a favorite scent to flavor the air flowing through the mask. There are no shots or needles used while your child is still awake.
- Once your child is asleep, an intravenous (*in-tra-VEE-nuss*) or IV line will be inserted into a vein in your child’s arm or leg so that medication can be given to keep him or her sleeping throughout the surgery. Your child will have no pain during the surgery and no memory of it afterward.

A Parent’s/Guardian’s Role

The most important role of a parent or guardian is to help your child stay calm and relaxed before the surgery. The best way to help your child stay calm is for you to stay calm.

During the surgery, at least one parent or guardian should remain in the surgical family waiting area at all times, in case the family needs to be reached.

While Asleep

While your child is asleep, his or her heart rate, blood pressure, temperature and blood oxygen level will be checked continuously. To keep your child asleep during the surgery, he or she may be given anesthesia medication by mask, through the IV or both. When the surgery is over, the medications will be stopped and your child will begin to wake up.

Waking Up

When your child is moved to the recovery room, you will be called so that you can be there as he or she wakes up.

- Your child will need to stay in the recovery room to be watched until he or she is alert and vital signs are stable. The length of time your child will spend in the recovery room will vary because some children take longer than others to wake up after anesthesia.
- Your child will still have the IV in. A nurse will remove it before your child leaves the hospital, when he or she drinking well.
- Your child will have set of padded arm restraints called “no-no’s” placed on his or her arms to prevent them from bending at the elbow. These no-no’s will need to stay in place for about 2 weeks as the surgical scar heals.
- Children coming out of anesthesia may react in different ways. Your child may cry, be fussy or confused, feel sick to his or her stomach, or vomit. These reactions are normal and will go away as the anesthesia wears off.
- Your child will have sutures (*SOO-chers*) or 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 skin heals, the parts of the sutures under the skin on the inside of the mouth will dissolve on their own, and the parts you can see on the outside of the skin will melt away in the normal course of eating and drinking over the next 2 weeks.
- 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 clean his or her scar so that you will become comfortable caring for your child at home.



CLEFT PALATE REPAIR cont'd

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 cup only.
- 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.
- Some children will need to stay for more than 1 day if they are not drinking and urinating normally, or if their parents need extra time to learn how to care for them.
- Your child may be given Tylenol® with Codeine prescription medication for pain relief when he or she leaves the hospital. Over-the-counter Motrin® can be combined with the Tylenol with Codeine if your child is still having pain, but most children only need over-the-counter Tylenol once they get home. **DO NOT give your child any over-the-counter Tylenol while he or she is still on Tylenol with Codeine.**
- The long-sleeve T-shirt you brought from home will be used on the day your child goes home. Place the T-shirt on your child, then put the no-no's on. Roll the cuff of the T-shirt over the edge of the no-no's and pin them to the T-shirt with a safety pin. Additional safety pins can be used to pin the no-no's to the T-shirt at the shoulders as well. A nurse will show you what to do if you have any questions.
- As soon as you get home, you should call to make an appointment for your child to be checked 1 week after surgery.

At-Home Care

A complete list of instructions for taking care of your child at home will be given to you before you leave the hospital. The main things to remember are:

- 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 or 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 (such as Go-GURT®), 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 may be given an antibiotic for the first couple of weeks after surgery
- The no-no's must stay on your child's arms for at least 2 weeks. You should check them every 2 to 4 hours to make sure they are not too tight, and take them off briefly several times a day to allow your child to bend and move his or her arms. Change the long-sleeve T-shirt after you bathe your child.
- Occasionally, the no-no's will be taped in place with signs that say, "Do Not Remove." If that is the case with your child, it is important that you leave them in place until your doctor removes them.

Special Needs

If your child has any special needs or health issues you feel the doctor needs to know about, or if you have any questions, please call 412-692-8650 **before** the surgery and ask to speak with the nurse practitioner or cleft clinic coordinator. It is important to notify us **in advance** about any special needs your child might have.

To contact your child's surgeon, call 412-692-7949. If you are unable to reach the surgeon, or it is after hours, call the Children's Hospital operator at 412-692-5325 and ask to page the doctor who is on-call for your child's surgeon.

Cleft-Craniofacial Center
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To see the list of all available patient procedures descriptions, please visit www.chp.edu/procedures.