



NATIONWIDE CHILDREN'S
When your child needs a hospital, everything matters.

Helping Hand™

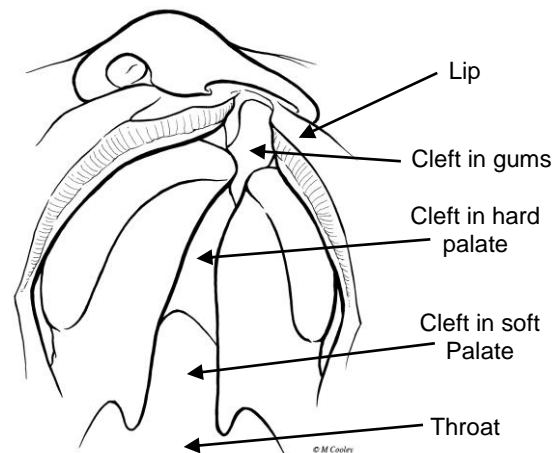
Health Education for Patients and Families

Cleft Palate Repair: The Surgery

When a child is born with an opening in the roof of the mouth, it's called a cleft palate (Picture 1). The palate or roof of the mouth has two parts: the hard palate in the front of the mouth and the soft palate in back. The hard palate is the bony part that is attached to the skull. The soft palate is the skin (tissue and muscles) that extends from where the hard palate ends to the back of the throat. Babies can be born with a split in one or both parts of the palates. They may also have a split in the gums and lip or a split in only one of these places.

A cleft palate makes it hard for children to eat and speak. Food and liquid go up through the opening into the nose (nasal passage) instead of going down the throat into the stomach.

For your child to be able to speak and swallow normally, the palate needs to seal off the inside passage of the nose from the throat.



Picture 1 Cleft palate
before surgery

Cleft palate is one of the most common problems found in newborn babies. Each year about 1 in 600 babies is born with a cleft. The cause is not known, but scientists are learning that both genetics (conditions that run-in families) and environment matter. You may want to meet with a health care provider who specializes in genetics to find out more about what may have caused your child's cleft palate.

The only way to repair a cleft palate is by surgery. The goal is to close the opening in the roof of the child's mouth. Your child will be in the operating room for 2 to 3 hours. The hospital stay is usually 1 to 3 days.

Preparing for Surgery

You'll start preparing your child for surgery 2 weeks before the scheduled date.

Starting 2 weeks before surgery, do not give aspirin or ibuprofen (Motrin® or Advil®). These medicines may cause bleeding problems after a cleft palate repair.

A nurse from the operating room (OR) may call you up to 1 week before surgery to review your child's health history. You'll be asked detailed questions about your child's current health, recent illnesses, allergies, past surgeries, medicines, and immunizations. It's important to know if they have been exposed to any contagious diseases, including the flu, COVID-19 or chickenpox, in the last month. Tell the nurse if your child's shots aren't up to date.

The day before surgery:

A nurse from the OR will call you to give you the following information:

- Time of surgery
- Time to arrive at the hospital and directions to the Surgery Unit entrance
- Food and drink instructions – it is very important to follow these exactly:
 - Your child may have human milk up to 4 hours and formula up to 6 hours before surgery. **All other liquids, semi-liquids and solid foods MUST BE STOPPED 8 hours before surgery.**
 - Your child may have **CLEAR LIQUIDS up to 2 hours before surgery.** After that, they may have nothing else to drink. Clear liquids are those you can **see through** that have no pulp or food bits in them. Examples of clear liquids are water, apple juice, white grape juice, and Pedialyte®.
- Prescription medicines – give your child their usual prescription medicines unless the doctor or health care provider has told you to stop certain ones before surgery. Give medicine with a very small sip of plain water or formula. If your child is due to take their medicine during the surgery, give it before coming to the hospital. If you have questions about medicine, ask the nurse who calls you.

The nurse will again ask you questions about your child's health, such as:

- Recent exposures to contagious diseases
- A list of medicines your child is taking
- Anything that the health care team need to know to care for the child

If no one has contacted you by **4 p.m.**, please call the main OR at (614)722-5200.

The day of surgery

- Give your child a bath before coming to the hospital.
- Pack a few favorite toys. Label all items with their name.
- Be prepared to fill out insurance and permission forms. Bring your health card or medical insurance card, your child's social security number, and your social security number or the social security number of the child's legal guardian.
- The nurse will review your child's medical history one more time.
- Your child will be weighed and measured. They'll have their blood pressure and temperature checked. They'll have a physical exam.
- The Cleft Palate Team of specialists will meet you before and after the surgery.
- A nurse will explain special care routines, procedures, and home care to you.
- Parents must wear their pink/yellow badges at all times. Visitors must go to the information desk and get a blue visitor's pass.
- Children under 12 are **not allowed** to visit the patient units.

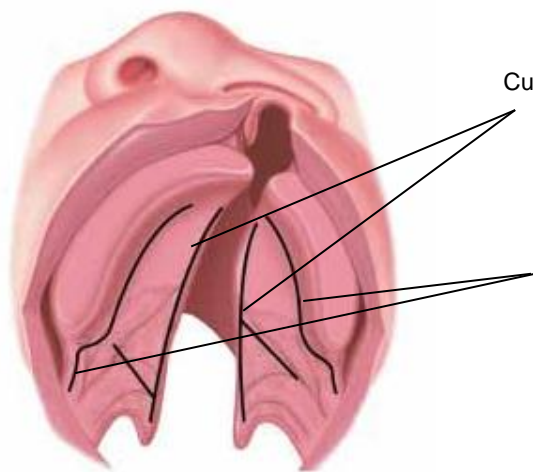
Surgery

A team of specialists work together during and after the surgery. First, a doctor called an anesthesiologist will give your child medicine to fall asleep. The medicine is given as a mist that is breathed in through a mask. After your child is asleep, the anesthesiologist will put an IV into a vein so a stronger pain medicine can be given. This stronger medicine helps your child go into a deeper sleep and not feel any pain. The anesthesiologist will stay in the operating room the entire time to make sure your child feels no pain.

After your child is asleep, the plastic surgeon will follow these steps:

1. Place a device or brace into your child's mouth to keep it open during the surgery.
2. Make cuts (incisions) on both sides of the palate along the cleft (Picture 2, page 4).

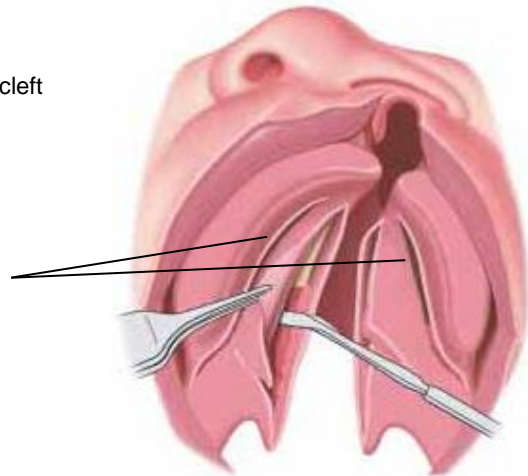
3. Loosen the layer of tissue attached to the bone of the hard palate. This will allow the tissue to be stretched (Picture 3).



Picture 2 Cuts or incisions into the palate

Cuts along the cleft palate (Step 2)

Cuts along the gums (Step 4)



Picture 3 Skin is loosened from the hard palate (Step 3)

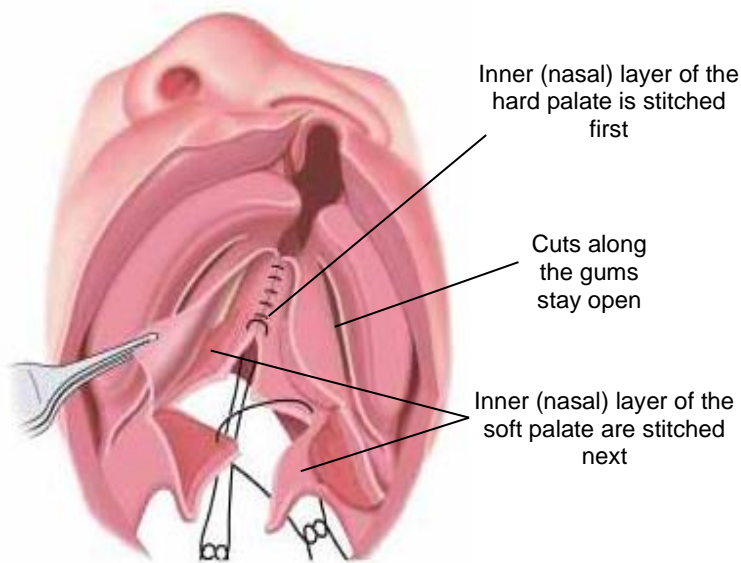
4. Make a cut along the gums. This will allow the tissue of the palate to be stretched and moved toward the middle of the roof of the mouth (Picture 2). The incisions along the gums will be left open to heal over the next 3 weeks.
5. Close the inner (nasal) layer of tissue using stitches (sutures) that will dissolve as the incision heals (Picture 4, page 5).
6. Close the outer (oral) layer of tissue with sutures that will dissolve (Picture 5, page 5).
7. The incision inside your child's mouth will look like a "Z" (Picture 5, page 5).

The surgery is now done.

The "Z" closure improves your child's speech in the following ways:

- It lengthens the soft palate. A "Z" incision is longer than one in a straight line. As any incision heals, it will shorten in length. The soft palate needs to be as long as possible. More tissue will help the palate seal and the nasal passage from the throat when your child speaks.
- It places the muscles in the soft palate into a more normal position to heal and grow.

If your child has a cleft in the gum, it will be repaired later. The child's upper jaw needs to grow many years before this opening is closed. The cleft in the gum is usually closed when your child is 7 or 8 years old. Often, the cleft lip has been repaired before the cleft palate surgery.



Picture 4 The inner (nasal) layer of tissue is closed.



Picture 5 The outer (oral) layer is closed (Step 6). "Z" shaped closure of repaired cleft palate (Step 7).

What to Expect After Surgery

Some pain is normal after surgery. Your child will be sent home with pain medicine and an antibiotic.

For the first few days after surgery, you may see the following:

- There may be a small amount of blood in the mucous or spit (saliva) for a few days. The mucous or saliva will look pink.
- More snot (clear drainage) than usual may come from the nose for a few weeks. This is because the opening between the nose and mouth is now closed. Before surgery, mucous drained directly into the mouth.
- Your child may snore and sound congested for a few weeks. This will go away when the swelling goes down and there is less drainage.
- It may be harder for your child to sleep as well as before surgery. Sleep habits should return to normal after a few weeks.
- Your child's appetite may not be as good as it was before surgery. After surgery, it's important to make sure they're drinking enough liquids to stay hydrated.

The Cleft Lip and Palate Center Helpline

Call (614) 722-6299 during regular business hours from 8 a.m. to 4 p.m., Monday to Friday. After hours, on weekends or holidays, call (614) 722-2000. Ask to speak with the plastic surgeon on-call.

Team Care Post-op

The Cleft Lip and Palate Center at Nationwide Children's Hospital cares for patients with cleft lip and/or palate and related craniofacial conditions. We believe team care is the best care. Our team includes:

- Nurses
- Dentists
- Geneticists
- Social workers
- Orthodontists
- Audiologists
- Psychologists
- Plastic surgeons
- Feeding specialists
- Nurse practitioners
- Otolaryngologists
- Speech-language pathologists

This team works closely to make a personal care plan for your child that works as they grow. We believe that starting team care early is the best way to support your child's development.

You can expect your child's first team visit to start at about 15 to 18 months of age. Please call (614) 722-6537 or send us a message on MyChart® to schedule your child's first team visit.