

# Cleft Lip and Palate Repair

## What Is Cleft Lip or Palate Repair?

Cleft lip and/or cleft palate repair is surgery to fix separation of the upper lip or a split in the roof of the mouth. Cleft lip and palate can be repaired through plastic surgery.

Surgery is designed to improve a child's ability to eat, speak and hear, and restore a more normal appearance. An infant's initial cleft lip and/or cleft palate repair often makes a vast difference in quality of life. Secondary procedures, however, might be needed for functional reasons or to refine appearance.

## Cleft Lip Repair

Cleft lip repair typically requires only one reconstructive surgery to restore the mouth's normal shape and muscle function. This surgery typically occurs when babies are about 3 months old. During cleft lip surgery, nostrils are repaired with later revisions, if needed. In addition to improving appearance and function, goals of surgery include:

- Closing the cleft lip.
- Forming a cupid's bow (the curve at the center of the upper lip).
- Creating adequate distance between the upper lip and nose.

Even though the scars of a cleft lip repair are generally located within the normal contours of the face, they will always be visible.

## Cleft Palate Repair

By closing the opening in the roof of the mouth, this repair creates the floor of the nasal cavity. The surgery improves a child's ability to speak and eat, eliminating the need for modified bottles and feeding techniques. Cleft palate surgery typically occurs when a baby is 9 to 12 months old.

Some children who have cleft palates will need additional surgeries or treatments as they develop—to help with speech, improve the appearance of the lip, close openings near the mouth or add bone to the upper gum to allow for proper gum development. Often, children who've had repair surgeries for orthodontic issues and speech and language development concerns are monitored through adolescence.

When the cleft also affects the shape of the nose, additional procedures can:

- Improve symmetry between the nostrils.
- Create an adequate length of tissue separating the nostrils.
- Minimize the appearance of a flattened tip of the nose or a nose that pulls downward.

Surgery  
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**QUALITY OF LIFE**

Cleft lip repair  
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**3**  
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## Who Benefits from Cleft Lip and Palate Repair?

Among the most common congenital abnormalities affecting children in North America, cleft lip and/or cleft palate occur in approximately one of every 700 babies. Nearly all people who have cleft lip and/or cleft palate benefit from repair surgery.

Gillette Children's Specialty Healthcare offers cleft lip treatment and cleft palate treatment at various stages of life.

- Prenatal diagnosis and consultation: We provide timely consultations to help your family learn about conditions like cleft lip and palate and understand the available treatment options before your baby is born.
- Babies: Early intervention by a team of specialists is essential in cleft lip and/or cleft palate repair.
- Older children: If you have adopted, or are adopting an older child, we help with cleft repair surgery and treatment during childhood, rather than infancy.

Surgical procedures to repair cleft lip and palate and additional surgeries typically occur as follows:

Gillette is a leading provider of cleft lip and palate repair surgery for babies and children who have cleft lip and palate. Led by a team of board-certified craniofacial and plastic surgeons, our team works to promote self-confidence for your baby or child.

## Preparing for Cleft Lip and Palate Repair

Surgery is often one part of a comprehensive treatment plan. Before your child has cleft lip and/or palate repair surgery, you will likely need to schedule a series of appointments. Before having surgery, your child might also need to wear an OrthoCleft® retainer, an orthodontic device that will help shape your child's mouth, nose and lip to improve the surgical outcome.

## Appointments Before Cleft Lip and Palate Repair Surgery

Soon after your baby is born, our staff meets with you several times to discuss cleft repair surgery and ensure your child is growing and feeding well.

Your family meets with a plastic surgeon, nurse practitioners and orthodontist to discuss the surgery and ask any questions you might have. You get instructions and information on what to expect before and after surgery.

## Treatment Before Surgery

Before surgery, Gillette surgeons often recommend that your infant wears the OrthoCleft® appliance—a device that can help improve your child's outcome following surgery. Estimates show that children who use it need 20 to 30 percent fewer reconstructive surgeries than those who don't.

The OrthoCleft® is custom-molded to your baby's mouth and looks similar to an orthodontic retainer. Your baby wears the device 24 hours a day (except for cleaning twice daily) until lip repair surgery—taking advantage of the fact that cartilage molds easily during the first six weeks of life.

The OrthoCleft® helps:

- Bring the gum segments together.
- Reduce the size of the gap in the mouth.
- Stretch the lip muscles.
- Give the nose a more even shape.

Many babies feed better once they begin wearing it.

Like other oral retainers, the OrthoCleft® retainer is made of acrylic and wires. We use soft acrylic for areas that touch the mouth or nose, making the appliance easier for your baby to tolerate. Our orthodontists customize and fit the appliance when your baby is about a week old. Once a month—until the first surgery takes place, at about 3 months—we make a new appliance to address growth.

In most cases, proper treatment before surgery results in correction with a single surgery (rather than requiring multiple procedures over time).

Because your baby will need an empty stomach before going to surgery, you'll get specific instructions on when to stop feeding your child. You're encouraged to have your baby drink a lot the day before surgery and to wake them up early in the morning to have something to drink until oral feeding should stop. If your baby gets sick before surgery, let us know so that we can decide whether to proceed with the scheduled procedure.

## Tell Us About Latex Allergies

Gillette is a latex-free facility, but it's still important to tell us if your child has a latex allergy or has ever had a severe

reaction to latex.

## Manage Stress

Sometimes fears, behavior or expectations related to the upcoming surgery cause stress for families. Contact your child's primary health care provider or [Child and Family Services](#) for support.

Gillette can help with resources that might help reduce anxiety for all of your family members. Our [child life specialists](#) can provide emotional support and distractions (such as toys and movies we can bring to the preoperative waiting area before surgery begins). Child life specialists also can meet with your child's siblings to address their feelings and concerns.

Knowing what to expect can help everyone feel more prepared. We'll be sure to help clarify short- and long-term expectations for outcomes following repair surgery.

## During Your Hospital stay

### The Day of Surgery

#### Arrival

The Perianesthesia staff greets you upon arrival. Your child is weighed and changed into a hospital gown. We also check temperature, pulse and blood pressure.

#### Surgery Preparation

Next, you and your child meet with the cleft lip and palate surgery team: nurse practitioners, the plastic surgeon, the nurse anesthetist and the anesthesiologist. This is time for you to raise any questions or concerns—the anesthesiologist discusses how anesthesia and pain medication are used during surgery. You might talk about your child's experiences with pain and request medication or other techniques to help decrease anxiety.

#### Surgery

First, your baby receives medication for comfort during surgery and anesthesia. Once your child is asleep, we start an IV and insert a breathing tube.

For cleft lip repair surgery:

- A plastic surgeon makes an incision on either side of the cleft to create flaps of tissue.
- The surgeon then draws the flaps together and stitches them to close the cleft.
- We modify the procedure for babies who need bilateral cleft lip repair (repair on both sides of the upper lip).
- The surgeon uses stitches to close the repair and a bandage along the gum line incision.

For cleft palate repair surgery:

- This repair requires careful repositioning of tissue and muscles to close the cleft. A plastic surgeon makes incisions on either side of the cleft and uses specialized techniques to reposition both muscle and the hard and soft components of the palate.
- The surgeon uses stitches to close the repair, generally at the midline of the roof of the mouth, and then uses a bandage along the gum line incision.

Usually, families can expect the repair surgery to take an hour.

## After Surgery

After the cleft lip and palate surgery is complete, you meet with a craniofacial care provider to discuss the surgery. Once your baby awakens from anesthesia and is in stable recovery, you join your child—who will stay overnight at the hospital. One to two family members or caregivers can stay overnight with your child.

Your child's incision remains open to air but has bacitracin ointment on it to help prevent infection. Nurses apply more bacitracin ointment to the incision regularly.

You'll receive specific guidelines before you leave the hospital, including:

- How to care for the surgical site following surgery.
- What medication to apply or take orally to aid healing and reduce the risk of infection.
- Which specific concerns to look for in the general health of your baby.
- When to follow up with your plastic surgeon.
- How to feed your baby.

After surgery, your baby can return to using a bottle or cup, depending on the procedure they had. Older children who've had cleft palate repair surgery typically need to be on a full liquid or pureed diet for two weeks, or as directed by the surgeon.

## Going Home

Your child will likely be released from the hospital the day after surgery. Recovery continues for several weeks as swelling goes down after the procedure.

During the first week following surgery, your baby might behave differently as compared to before surgery. It is normal for a baby to be fussier than usual. Additional attention to feeding might be needed at first, but most babies return to their regular feeding habits without difficulty.

If your child had cleft palate repair, they might have some discomfort in the area of the incision. However, this usually lasts for only a few days and improves each day after surgery. Your child may want to be held more frequently after surgery. Holding and comforting your child might decrease the need for pain medication.

Incisions inside the mouth are closed with sutures that dissolve in 10-14 days. Do not rinse or rub the incision to clean it. The incision will heal best without any manipulation or handling.

Your child might come home with soft arm restraints called “no-no” sleeves. The sleeves keep your child from putting hands, toys or other objects in the mouth. You may remove the sleeves when you’re holding and supervising your child. Your child will wear the sleeves until the follow-up appointment with the craniofacial team—usually in about 7-10 days.

## Return Appointments

Your family will return for a postoperative visit about one week after surgery. A plastic surgeon examines the incisions and addresses any concerns you might have. Other follow-up visits might include appointments once your baby is 18 to 24 months old.

Our [speech and language pathologists](#) work with patients to improve speech after cleft repair surgery. Our speech therapists collaborate with [audiologists](#) and [ear, nose and throat \(ENT\) specialists](#) throughout the repair process.

## Integrated Care

Gillette is one of the region’s top craniofacial centers with state-of-the-art technology and facilities for kids who have cleft lip or cleft palate. By offering all services under one roof, we can collaborate to treat any problems associated with cleft lip or palate. Our specialists guide you through the services you need as your child grows and develops. Your family might work with specialists in:

- [Craniofacial and plastic surgery.](#)
- [Dentistry and orthodontia.](#)
- [Ear, nose and throat \(ENT or otolaryngology\).](#)
- [Audiology.](#)
- [Child life.](#)
- [Medical genetics and genetic counseling.](#)
- [Neurodevelopmental pediatrics.](#)
- [Neuropsychology.](#)
- [Neurosurgery.](#)
- [Social work.](#)
- [Speech and language therapy.](#)

## Explore Cleft Lip and Palate Resources

- See our [Guide to Cleft Lip and Palate Repair infographic \(PDF\).](#)
- Visit [Cleft Palate Foundation](#) for information and support resources.

- Learn about craniofacial conditions at [FACES: The National Craniofacial Association](#).

Make An Appointment

[651-290-8707](#)

Refer a Patient

[651-325-2200](#)

This information is for educational purposes only. It is not intended to replace the advice of your health care providers. If you have any questions, talk with your doctor or others on your health care team.

If you are a Gillette patient with urgent questions or concerns, please contact Telehealth Nursing at [651-229-3890](#).