

CLEFT LIP AND PALATE REPAIR



The Symbol of Excellence in Plastic Surgery®

A public education service of the American Society of Plastic Surgeons®.

The first step:

Choose a surgeon you can trust

Plastic surgery, whether for cosmetic or reconstructive purposes, involves many choices. The first and most important is selecting a surgeon you can trust. A doctor's board certification is one of the best indicators of his or her training. Ask for certification from The American Board of Plastic Surgery® (ABPS), the only one of the 24 boards approved by the American Board of Medical Specialties (ABMS) that certifies physicians in plastic surgery of the face and all areas of the body. To be ABPS board-certified, a physician must meet these rigorous standards:

- ▶ Graduate from an accredited medical school
- ▶ Complete at least **five** years of surgical training following medical school with a minimum of **two** years of plastic surgery residency training
- ▶ Pass comprehensive oral and written exams

American Society of Plastic Surgeons (ASPS) Members must:

- ▶ Be certified by the ABPS or in Canada by The Royal College of Physicians and Surgeons of Canada®
- ▶ Complete continuing medical education including patient safety each year
- ▶ Perform surgery in accredited, state-licensed or Medicare-certified surgical facilities



Your child's cleft lip and palate repair

Cleft lip (cheiloschisis) and cleft palate (palatoschisis) are among the most common birth conditions affecting children in North America. The incomplete formation of the upper lip (cleft lip) or roof of the mouth (cleft palate) can occur individually, or both defects may occur together. The conditions can vary in severity and may involve one or both sides of the face.

A cleft, or separation of the upper lip and/or the roof of the mouth, occurs very early in the development of your unborn child. During fetal development, certain components of the upper lip and roof of the mouth fail to form normally. Cleft lip and cleft palate repairs are types of plastic surgery that correct this abnormal development both to restore function and to restore a more normal appearance.

Most clefts can be repaired through specialized plastic surgery techniques, improving your child's ability to eat, speak, hear and breathe, and to restore a more normal appearance and function.

A team of specialists can help

Early intervention by a team of specialists to evaluate your child is essential in cleft lip and/or cleft palate repair. The team can work together to define a course of treatment, including surgical repair of the cleft, speech rehabilitation and dental restoration. These specialists may include a:

- ▶ Plastic surgeon
- ▶ Pediatrician
- ▶ Pediatric dentist
- ▶ Otolaryngologist (ear, nose, and throat specialist)
- ▶ Auditory or hearing specialist
- ▶ Speech pathologist
- ▶ Genetic counselor
- ▶ Social worker

More than a cosmetic repair

Surgery to repair a cleft of any kind is a highly individualized procedure that is intended not only to close the defect, but also to insure your child's ability to function normally.

Cleft lip repair, also called cheiloplasty, includes reconstruction to restore a more normal appearance, namely:

- ▶ Repairs the muscle of the lip to allow for normal movement in expression, speech and eating
- ▶ Closure of the cleft resulting in a scar located in the normal structures of the upper lip
- ▶ Formation of a cupid's bow (the curve at the center of the upper lip)
- ▶ Considerations for adequate distance between the upper lip and nose
- ▶ Repairs the outside rim or base of the nose for more normal appearance

Because the palate is both the roof of the mouth and the floor of the nose, considerations in repairing a cleft palate include:

- ▶ Allowing for normal function and speech development
- ▶ Relation of the palate to the auditory canal and hearing
- ▶ Development of the teeth and jaw alignment

Where the cleft also affects the shape of the nose, additional procedures may be recommended to:

- ▶ Achieve symmetry between the nostrils
- ▶ Create adequate length of the columella (the tissue that separates the nostrils)
- ▶ Increase the angle of the nasal tip, to avoid a flattened nasal tip or one that pulls downward

More than a cosmetic repair

When should my child have the surgery?

The timing of the cleft repairs depend on the individual circumstances of your child.

Generally, lip repair occurs between 2-4 months of age, when the child is feeding and growing in a stable fashion.

Cleft palate repairs are generally performed when a child is somewhat older, from 9 to 18 months of age.

Cleft repair may be delayed in order to treat other, more life-threatening problems that may be present such as a heart or lung disorder.



What to expect during your consultation

The success and safety of your child's cleft procedure starts with a consultation with a plastic surgeon and depends very much on your complete candidness.

Be prepared to discuss:

- ▶ Your concerns and an evaluation of your child's condition
- ▶ Options available for cleft lip and/or cleft palate repair
- ▶ Likely outcomes of surgery and the potential risks and complications associated with the procedure
- ▶ A recommended course of treatment

Be candid about your concerns for your child and your plastic surgeon's ability to meet his or her special needs. The success of your child's procedure, safety and overall satisfaction requires that you:

- ▶ Honestly share your concerns
- ▶ Fully disclose your child's health history including current medications, vitamins, and herbal supplements
- ▶ Commit to precisely following all of your plastic surgeon's instructions



Preparing for surgery



Prior to surgery, your plastic surgeon will discuss with you:

- ▶ Pre-surgical considerations, diagnostic testing and medications
- ▶ Day-of-surgery instructions and medications
- ▶ Specific information related to the use of anesthesia
- ▶ Postoperative care and follow-up

Your plastic surgeon will also discuss where your child's procedure will be performed. Cleft repair is generally performed in a hospital setting under general anesthesia.

Prior to surgery: In some cases, your child may be given an intraoral (inside the mouth) device, called an obturator, to wear prior to repair of the cleft lip which may assist in feeding and maintain the arch of the lip prior to repair.

Procedural Steps:

What happens during cleft lip and palate surgery?

Step 1 – Anesthesia

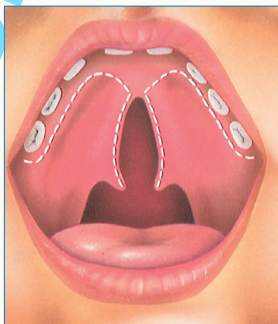
General anesthesia is used to maintain your child's comfort during the surgical procedures.

Step 2 – The incision

The goal of **cleft lip** surgery is to close the separation in the lip and to provide a more normal function, structure and appearance to the upper lip. Incisions are made on either side of the cleft to create flaps of tissue that are then drawn together and stitched to close the cleft.



The repair of a **cleft palate** requires careful repositioning of tissue and muscles to close the cleft and rebuild the roof of the mouth. Incisions are made on either side of the cleft and specialized flap techniques are used to reposition muscle and the hard and soft components of the palate. The repair is then stitched closed, generally at the midline of the roof of the mouth, providing enough length of the palate to allow for normal feeding and speech development, and continued growth throughout life.

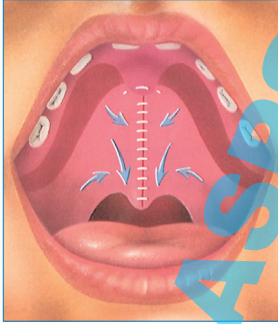


Procedural Steps:

What happens during cleft lip and palate surgery?

Step 3 – Closing the incisions

Cleft lip and palate incisions can be closed with removable or absorbable sutures.



A special note: It is important to understand that while a cleft may be surgically repaired in a single plastic surgery procedure, treating a child born with a cleft continues through adolescence and sometimes even adulthood. As a child grows, secondary plastic surgery procedures to improve function and appearance may be required.

Step 4 – See the results

The resulting external scars of a cleft repair are generally positioned in the normal contours of the upper lip and nose. Over time, these will fade and your child's ability to grow and function normally will continue to improve.



Important facts about the safety and risks of cleft repair surgery

The decision to have cleft surgery is extremely personal and your plastic surgeon and/or staff will explain the benefits, goals and potential risks or complications. You will be asked to sign consent forms to ensure that you fully understand the procedure, the alternatives and the most likely risks or potential complications.

Some of the risks include:

- ▶ Bleeding (hematoma)
- ▶ Infection
- ▶ Poor healing of incisions
- ▶ Irregular healing of scars including contracture (puckering or pulling together of tissues)
- ▶ Residual irregularities and asymmetries
- ▶ Anesthesia risks
- ▶ Allergies to tape, suture materials and glues, blood products, topical preparations or injected agents
- ▶ Damage to deeper structures – such as nerves, blood vessels, muscles, and lungs – can occur and may be temporary or permanent
- ▶ Possibility of revisional surgery

Be sure to ask questions: It's natural to feel some anxiety, whether excitement for the anticipated outcomes for your child or preoperative stress. Please discuss these feelings with your plastic surgeon.

Your child's recovery and results

After surgery, dressings or bandages may be placed on incisions outside your child's mouth.

You will be given specific instructions that may include: How to care for the surgical site following surgery, medications to apply or take orally to aid healing and reduce the risk of infection, specific concerns to look for in the general health of your child, and when to follow-up with your plastic surgeon.

Your plastic surgeon or the attending staff will instruct you on feeding your child as well as any restrictions or special activity instructions.

Don't be surprised if you find that arm immobilizers have been placed on your child in recovery. They will prevent him or her from injuring the surgical site as it heals. Restraints may be removed several times a day, so long as your child is supervised and prevented from touching the surgical site or sucking a thumb.

Your child's discomfort can be controlled with pain medication. If necessary, sutures will be removed following surgery. Healing will continue for several weeks as swelling resolves.

After surgery, diligent sun protection is essential to prevent the formation of irregular scars.

Results and outlook

The outcome of your child's initial cleft lip and/or cleft palate repair will make a vast difference in his or her quality of life, ability to breathe, eat and speak. However, secondary procedures may be needed for functional reasons or to refine appearance. Even though the scars of a cleft lip repair are generally located within the normal contours of the face, they will always be visible.

How much will cleft surgery cost?

Cost is always a consideration in surgery. A surgeon's cost may vary based on his or her experience, the type of procedure used, as well as geographic location.

Cost may include:

- ▶ Surgeon's fee
- ▶ Hospital or surgical facility costs
- ▶ Anesthesia fees
- ▶ Prescriptions for medication, and
- ▶ Medical tests

Your health insurance plans will likely cover initial cleft lip and palate surgeries because they are reconstructive procedures. Be certain to check with your insurance carrier. Coverage varies among insurers including precertification requirements, coverage for secondary procedures and allied healthcare services such as speech therapy.

The American Society of Plastic Surgeons, in conjunction with the American Academy of Pediatrics, have co-authored a position statement regarding healthcare coverage for the reconstruction of abnormal appearance in children, including cleft repair. Ask your plastic surgeon for a copy of this document to file with your insurance claims.

Your satisfaction involves more than a fee

When choosing a plastic surgeon for your child's cleft surgery, remember that the surgeon's experience and your comfort with him or her are just as important as the final cost of the surgery.

Words to know

Cheiloplasty: Cleft lip repair surgery.

Cheiloschisis: The scientific term for a cleft lip.

Cleft lip: The incomplete formation of the upper lip.

Cleft palate: The incomplete formation of the roof of the mouth.

Cleft: A separation of the upper lip and/or the roof of the mouth.

Columella: Tissue that separates the nostrils.

Contracture: A puckering or pulling together of tissues; a potential side effect of cleft surgery.

General anesthesia: Drugs and/or gases used during an operation to relieve pain and alter consciousness.

Hemoglobin: Blood count.

Intraoral: Inside the mouth.

Palatoschisis: The scientific term for a cleft palate.

Questions to ask my plastic surgeon

Use this checklist as a guide during your consultation

- ☐ Are you certified by the American Board of Plastic Surgery?
- ☐ Are you a member of the American Society of Plastic Surgeons?
- ☐ Were you specially trained in the field of plastic surgery?
- ☐ Do you have hospital privileges to perform this procedure?
If so, at which hospitals?
- ☐ Is the office-based surgical facility accredited by a nationally or state recognized accrediting agency, or is it state-licensed or Medicare-certified?
- ☐ How many procedures of this type have you performed?
- ☐ Is my child a good candidate for this procedure?
- ☐ What will be expected to get the best results?
- ☐ Where and how will you perform my child's procedure?
- ☐ What shape, size, surface texturing, incision site and placement site are recommended for my child?
- ☐ How long of a recovery period can we expect, and what kind of help will my child need during my recovery?
- ☐ What are the risks and complications associated with this procedure?
- ☐ How are complications handled?
- ☐ What are my options if I am dissatisfied with the outcome of my child's cleft surgery?
- ☐ Do you have before-and-after photos I can look at for each procedure and what are reasonable results?

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Notes

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