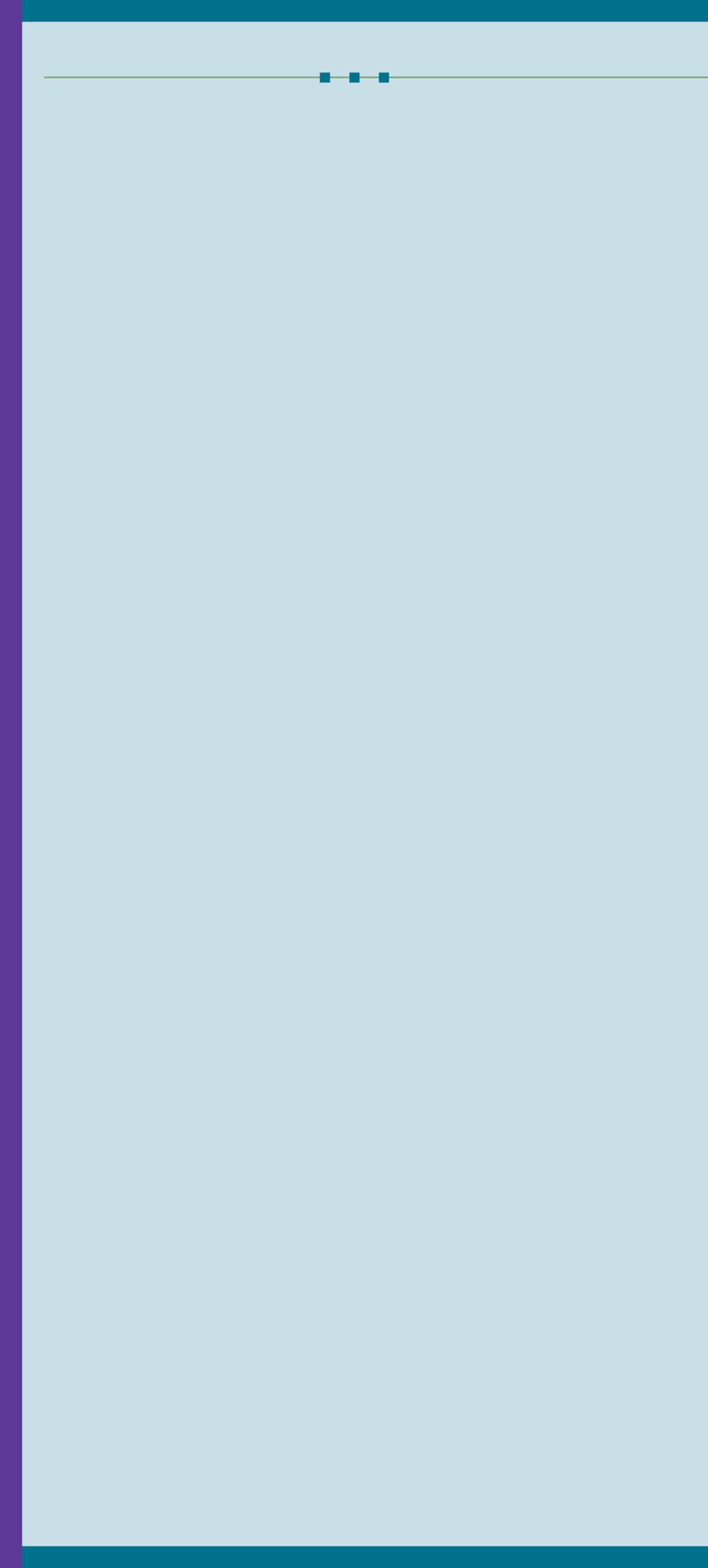




CLEFT
PALATE
FOUNDATION

CLEFT SURGERY



CLEFT SURGERY

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INTRODUCTION

A baby's face and mouth form in the early weeks of pregnancy. In the first ten weeks, the left and right sides of the face and the roof of the mouth join together. If the sides do not join correctly, an opening in either the lip or the roof of the mouth may result. An opening in the lip is called a cleft lip, and an opening in the roof of the mouth is called a cleft palate. These openings can be on just the right or the left side of the face or palate (called a "unilateral cleft") or on both sides (called a "bilateral cleft"). A child may be born with a cleft lip, a cleft palate, or both. A cleft lip that extends to the nose is called a "complete cleft lip," and a cleft palate that affects the entire roof of the mouth is considered a "complete cleft palate." Otherwise the clefts are described as "incomplete."

A child born with either cleft lip or cleft palate almost always needs surgery to correct this condition. Virtually all children born with clefts who receive appropriate care go on to lead happy, healthy, and productive lives. This booklet will provide you with some basic information about clefts and the surgical procedures to correct them. Each child is an individual, however, and you should be sure to discuss your child's unique situation with your doctor.

BIRTH THROUGH TEEN



*Newborn with incomplete
bilateral cleft lip*



*One year after
surgery*



Age 17 years

*Photos provided courtesy of
James A. Lehman, Jr., MD*

TEAM CARE

As they grow up, children born with cleft lip and palate will usually need the services of several different health care professionals. Besides just surgically closing the opening in the lip or palate, these children may need additional help with their eating, teeth, speech, ears and hearing, and social/psychological development as the years go by.

Because no one person is an expert in all of these areas, children born with cleft lip and palate are usually seen by teams of professionals. These teams have been formed around the country to deal with the broad range of concerns for children born with clefts. Making an early appointment with one of these teams in your area (called a “Cleft Lip and Palate Team” or “Craniofacial Team”) will allow you to ask questions and better understand your child’s special situation and his/her treatment program. Typically, a cleft team includes plastic surgeons, ear/nose/throat specialists (ENT’s), pediatricians, orthodontists, oral and maxillofacial surgeons, prosthodontists, pediatric dentists, speech pathologists, audiologists, nurses, genetic counselors, psychologists and social workers. Your primary care doctor should be able to refer you to a team in your area, or you can contact the Cleft Palate Foundation at 1-800-24-CLEFT or www.cleftline.org. One benefit of the team approach is that, in many cases, different specialists can treat your child during the same surgery (such as the insertion of tubes into his/her ears to prevent ear infections, if necessary, at the same time as the lip or palate is repaired).

GENERAL CONSIDERATIONS ABOUT SURGERY

The results from cleft lip or palate surgery can be very positive when they are performed by an experienced surgeon. With any surgical procedure, though, there are risks and potential complications. Bleeding, infection, damage to nerves or blood vessels, and reactions to anesthesia are possible with any surgery. These potential risks should be explained by your surgeon and anesthesiologist. In the rare event of these complications, more surgery may be necessary.

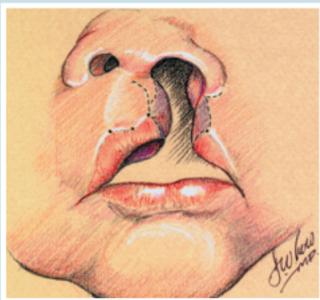
You should discuss the need for and timing of surgical procedures with your cleft palate team. Your surgeon can also describe the specific procedures to be performed and can answer questions about eating and medications both before and after surgery.

Health insurance companies generally consider cleft lip and palate surgery to be reconstructive surgery, and most will cover it under the terms of your contract. You will need to speak with both your surgeon and your insurance company before any procedures are done to make sure all the necessary paperwork is completed.

(See the Cleft Palate Foundation's "Dealing with Your Insurance Company/HMO" factsheet for more information.)

CLEFT LIP SURGERY

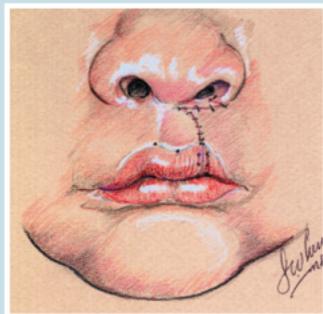
Surgery to repair cleft lip is usually done at about 10 weeks of life or later. This timing can vary based on individual circumstances and should be discussed with your surgeon. In most cases, the tissue in the area around the cleft is rearranged to close the opening. An



important part of the surgery involves detaching and repositioning the muscle of the lip to recreate the circular muscle around the mouth that will allow the lips to pucker. The drawings

on this page show how incisions are normally planned and how the natural shape of the upper lip (“cupid’s bow”) is reconstructed. The lip can be repaired in a single step or in multiple procedures, depending on factors such as the width and extent of the cleft. The surgeon may try to provide some additional support for the nose during lip repair, but he/she will generally not attempt full nasal reconstruction on an infant.

In repairing a unilateral cleft lip, it can be difficult for the surgeon to make the repaired side exactly match the unaffected side. It may take more than one surgery to achieve the best possible appearance and function of the child’s lip. This is especially true because as the child grows, the scars from previous surgeries may not grow and stretch in the same way as skin without any scars. As your child’s face develops, there may be a time when it would be appropriate and beneficial to have a “touch up” surgery to improve the appearance of the



Unilateral complete cleft lip repair, Millard technique

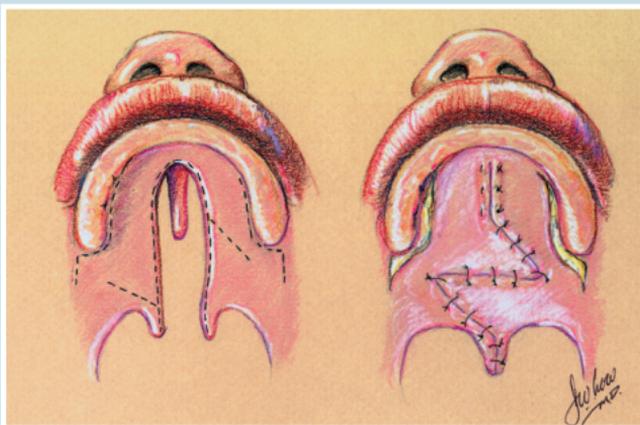
Drawings by David Low, M.D.

lip. If your child is dissatisfied with the result of the initial repair, this additional surgery might be performed before he/she starts school. Multiple touch-up procedures are generally not recommended, though, because each surgery creates more scar tissue.

CLEFT PALATE SURGERY

Cleft palate repair is usually performed between 6 and 18 months of age. As with cleft lip repair, the tissue of the palate is detached and rearranged to close the cleft. There is generally no need to take tissue from other parts of the body for this procedure. The muscles of the soft palate are also repositioned to allow for the best possible function for speech. The drawings below show diagrams of the incisions usually used to repair cleft palates.

The primary goal of repairing the palate is to achieve acceptable speech. Occasionally, this means that more than one surgical procedure may be needed to completely close the opening in the roof of the mouth. Even after the opening is completely closed, an additional surgical procedure may be needed to make the palate longer and more mobile so that your child has the mechanism to achieve normal speech.



*Palate repair,
Furlow technique
using lateral
relaxing
incisions*

Drawings by David Low,
M.D.

POST OPERATIVE CARE

After repair, the surgical site will be swollen and bruised. The stitches used will either dissolve or be removed a few days after surgery. Your surgeon will give you instructions about feeding your child and caring for the repaired area during this period. Arm restraints that keep your child's elbows from bending may be prescribed to prevent him/her from putting fingers or objects near the repair.

The scar on the lip usually looks red right after surgery. It may get firmer and tighter during the first few weeks after surgery. Although it will gradually fade, the scar will not completely disappear.

(For more information on this progression, see the Cleft Palate Foundation's "Answers to Common Questions About Scars" factsheet.)

QUESTIONS TO ASK YOUR SURGEON

Because different surgeons may have different approaches to treating cleft lip and palate, you may want to ask the following questions as you prepare for your child's surgery.

- *How old does my child need to be for this surgery? Why?*
- *How long will my child have to be in the hospital?*
- *Can more than one procedure be performed during the same operation?*
- *How do I feed my baby after repair?*
- *How can I manage any pain or discomfort that my child experiences?*
- *How long should I plan to take off from work to care for my child?*
- *How many hours will my child be under anesthesia?*
- *How will my child behave after surgery?*
- *What problems should I watch for after my child comes home from the hospital?*

About The Cleft Palate Foundation

The goal of the Cleft Palate Foundation is "to optimize the quality of life for individuals affected by facial birth defects." For more information on cleft lip and palate, or for a referral to a cleft lip and palate/craniofacial team in your area, contact:

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