Cleft Lip and Cleft Palate

Cleft lip and cleft palate are relatively common birth defects. Your baby may have one or the other or both defects. Cleft lip is a split of the upper lip, which may extend up to the nose. Cleft palate is a split or separation in the roof of the mouth. A baby with cleft lip or palate is treated by a specialized team, including a plastic surgeon; an ear, nose and throat doctor; a speech therapist; and other professionals.

What are cleft lip and cleft palate?

Cleft lip and cleft palate are common birth defects in which a part of the lip and/or palate doesn't completely come together or close while the baby is developing in the womb, and so a split or cleft is left in that area. Sometimes they are part of a syndrome of birth defects. However, most of the time, cleft lip/cleft palate is the only abnormality.

Babies with cleft lip/cleft palate need special care to ensure proper feeding and prevent complications. Surgery is done to close the cleft lip and/or palate. Cleft lip is usually repaired by age 3 months, cleft palate by about 1 year.

Your baby may need further treatment as he or she grows, depending on the severity of the defect. Most babies with cleft lip and cleft palate are otherwise normal and do fine after surgery and other treatments.

What do they look like?

- Cleft lip and cleft palate. Clefts (splits) are visible in both the upper lip and palate (the roof of the mouth).
- Cleft lip or cleft palate may occur alone.
- The size, shape, and location of the clefts vary a great deal. Some babies have just a slight notch in the upper lip. Others have a split running all the way into the floor of the nose. Cleft palate may involve part or all of the roof of the mouth. The cleft is often in the middle of the lip or palate but also may be on either side.
- Occasionally these defects occur as part of a syndrome, with other abnormalities present.
- Many babies with cleft lip and cleft palate have trouble eating. This is because the split in their lip and/or palate interferes with their ability to suck normally. Special feeding methods are used to deal with this problem.

What causes cleft lip and cleft palate?

Usually, the exact cause is unknown. Possible causes include drugs the mother took during pregnancy, birth defect syndromes, or genetic factors.

What are some possible complications of cleft lip and cleft palate?

Immediately, babies with cleft lip and cleft palate may have feeding problems caused by their inability to suck normally. Babies with cleft palate are at risk of inhaling food (aspiration), which can lead to choking and pneumonia. Special techniques allow your baby to feed while reducing the risk of aspiration.

Later in life, cleft palate (but not cleft lip alone) may be related to other problems, including:

- Speech problems. If surgery is not completely successful, speech defects may develop. Your child's voice may sound unusual ("nasal"), or he or she may have difficulty making certain sounds.
- Ear/hearing problems. Cleft palate may result in fluid buildup behind the eardrum, leading to hearing loss.
- Dental problems may appear as your baby's teeth start to come in.

What puts your child at risk of cleft lip and cleft palate?

- The risk is higher in boys than girls.
- The risk is higher in Asian families, lower in African-American families.
- Cleft lip and cleft palate seem to run in families.
- Certain factors related to the mother during pregnancy may increase the risk of cleft palate, including:
 - Smoking.
 - Certain medications, such as drugs to lower cholesterol.

Can cleft lip and cleft palate be prevented?

Women who are pregnant or planning to have a baby can do some things to reduce the risk of cleft lip and palate:

- Taking a vitamin supplement containing folic acid (vitamin B₆) and other B complex vitamins may reduce the risk of cleft palate. This is especially important during the first 2 months of pregnancy.
- Talk to your obstetrician about any medications you are taking. For example, some medications used for epilepsy may lead to an increased risk of cleft palate.
- Don't smoke. (Using tobacco during pregnancy can harm your baby in other ways as well.)

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Some types of cleft lip/cleft palate are related to abnormal genes. Genetic counseling may help you to understand how this risk may affect future pregnancies.

How are cleft lip and cleft palate treated?

A team approach is used to treat babies and with cleft lip/cleft palate. Members of the team usually include a plastic surgeon; an ear, nose, and throat specialist (an otorhinolaryngologist); and a speech therapist. Other professionals may include a nutrition expert and a geneticist (a specialist in inherited diseases).

- Feeding. Feeding is a problem for many babies with cleft palate, with or without cleft lip. Until they have surgery, babies with cleft lip may also have feeding problems. These infants may have difficulty generating enough pressure to suck normally. Other babies may have problems with gagging or inhaling milk or formula.
 - Different solutions may be tried to make sure your baby gets enough food. Using a squeezable bottle with a soft nipple may be helpful. For some babies, a plastic shield called an "obturator" can be used. This device is specially shaped to cover your baby's cleft palate during feeding.
 - Many babies with cleft palate cannot breast-feed normally. Pumping breast milk and feeding it in bottles may be a way for your baby to get the health advantages of breast milk.
- Repair/Rehabilitation. Babies with cleft lip and palate need evaluation and treatment by a team of doctors and other health professionals. They can provide the expert services your child needs. The pediatrician is an important member of the team. Our office will continue to coordinate your child's medical care.

- A plastic surgeon generally plans the surgery needed to repair your child's cleft lip and palate. Surgery to repair cleft lip is usually performed when the baby is around 3 months old. Surgery to repair cleft palate is done before age 1 if possible. This operation is done to avoid problems with speech development. Additional surgeries may be needed as your child grows.
- An ear, nose, and throat specialist (an otorhinolaryngologist) will evaluate your child for any problems related to the ear. If ear infections are a problem, treatment is needed to prevent hearing loss.
- A speech-language pathologist can help in dealing with speech problems, if present.
- A *dentist or oral surgeon* can evaluate and treat any problems with your child's teeth.
- Other professionals may be involved in your child's care.
 These other treatments will depend on your child's individual needs.

A complete program of treatment for a child with cleft lip and palate takes many years. With expert care, most children with cleft lip and palate do fine, with no major complications.

When should I call your office?

After taking your baby home, call our office if you are having any problems with feeding, including:

- Your baby is not getting enough milk or formula.
- Choking, gagging, or milk coming out of baby's nose.
- Babies with cleft lip and palate need a lot of special care.
 Treatment can be pretty complicated. Call our office if you have any questions.