## Cleft Lip & Palate BIRTH DEFECT RESEARCH FOR CHILDREN



Oral clefts are birth defects of the structures that form the mouth. An oral cleft is a split or separation in the baby's lip and/or palate. Cleft lip means that the two sides of the upper lip did not grow together properly. Cleft palate is a split or opening in the roof of the mouth. Although cleft lip and cleft palate may occur in the same baby, both conditions can happen separately. The opening in the lip or palate may be unilateral, only on one side, or bilateral, on both sides.



## Cleft Lip and Palate



How Many Children Are Born With Oral Clefts?

Oral clefts are among the most common birth defects affecting one out or every 700-750 newborns. More than 250,000 people in the United States have a cleft condition with 25% of these having a cleft palate alone, 25% having only cleft lip and 50% having cleft lip and palate.

How Does An Oral Cleft Happen?

The unborn baby's mouth forms during the first three months of pregnancy. During this time, parts of the roof of the mouth and upper lip normally join together. When this joining does not take place, a child has a cleft lip and/or palate.

What Causes Oral Clefts?

Families that have a history of oral clefts in a parent, another child, or close relative, are more likely to have a baby with a cleft lip and/or palate. But oral clefts can also occur in families without such a background. Researchers believe that oral clefts are caused by many factors. This means that certain environmental factors interact with specific genes to interfere with the patterns of normal palate closure and lip development. Scientists are studying the role of exposure to certain drugs, chemicals, radiation and/or vitamin deficiencies as possible triggering agents which can interact with genes to cause oral clefts.

Helping A Child with Oral Cleft

Medical Team: A child with an oral cleft should be cared for by a cleft palate team, a group of specialists who are experienced in the care of children with cleft lip and/or palate. The team will work together to plan the best surgical and treatment program for a particular cleft defect. Some of the specialists on the team may work in the following areas:

Surgery: A baby's cleft lip and/or palate can be surgically repaired. The timing of these operations will depend on the weight and general health of the baby

and the severity of the cleft. At first, a cleft lip may be taped together until the baby grows bigger. The lip can be surgically repaired sometime before the age of three months. Any scars left from the surgery will usually fade as the child grows older until they are barely noticeable.

There are several ways to repair a cleft palate. A special dental plate may be made to cover the opening until the child is old enough for surgery, usually between the ages of 12 and 18 months. Operations to repair the palate may be carried out in several stages or completed in one procedure. As the child grows, additional surgery may be needed to correct defects of the lip, nose, gums, and palate.

Feeding: Babies with oral clefts may have problems nursing or drinking from a bottle. Special feeding appliances can help mothers who want to breast-feed their babies. A modified nipple allows milk to flow freely for bottle-fed

babies. Babies with clefts may swallow a lot of air and need to be burped frequently. Although feeding may take extra time at first, it will become easier as parents learn to adjust to their baby's special needs.

Ear problems: Children with cleft palate often have an increased number of ear infections early in life. The infections are caused by the incomplete development of the palate and palatal muscles that are needed to open eustachian tubes on either side of the throat leading to the ear. Children with this problem should be under the care of an ear, nose and throat specialist so that permanent damage to hearing does not occur because of chronic infections or fluid build-up in the ear.

Speech and language: Hearing loss can result in problems with learning to speak correctly. It is important for a child with a cleft palate to have early and frequent hearing tests so that ear problems can be monitored and treated.

Before a cleft palate is

## Cleft Lip and Palate



repaired, a child's voice may have a nasal quality. Although this will be corrected after surgery, every child with an oral cleft should be evaluated by a speech pathologist for:

- 1) language development,
- 2) articulation (proper vowel and consonant sounds)
- 3) resonance balance (tone quality).

The speech pathologist will help decide whether a child will need speech therapy to improve any of these skills.

Dentistry: Children with oral clefts may have dental problems. Pediatric dental specialists should be consulted as early as possible to make sure the child's jaw is the right size and shape to correct the position of individual teeth and to maintain good dental and oral hygiene.

Psychological evaluation: Coping with the needs of a child with an oral cleft can be a difficult adjustment for any family. A psychologist or social worker can help families work through some of their feelings and fears.

Support groups: Parents of children with oral clefts can find an excellent source of support and helpful information through national and local parent support groups.

Growing Up With An Oral Cleft

Through the team efforts of a surgeon, orthodontist, speech or hearing specialist and parents, a child can expect to look, speak and act just like other children. Although it may take a few years of treatment programs, the results will be well worth the wait.

Fact Sheet by:

Birth Defect Research Children, Inc.

www.birthdefects.org