Cleft Lip & Palate in New Mexico

Information for Parents and Providers

NEW MEXICO CLEFT PALATE CENTER

LUIS CUADROS MD, FACS - PLASTIC SURGERY - ALBUQUERQUE, NEW MEXICO

Member American Society of Plastic Surgeons and American Cleft Palate Association

Team approved by the American Cleft Palate Association

Cleft lip and palate is one of the most common developmental conditions affecting newborn babies. The exact cause is unknown. Most cases occur sporadically with no family history or other anomalies. The goal of treatment is to provide the child with as normal an appearance, speech and life as possible. To accomplish this, numerous specialists are involved at different stages of life from birth to infancy, and into childhood, adolescence and adulthood.

INCIDENCE OF CLEFT LIP AND PALATE IN NEW MEXICO

Cleft lip and palate occurs in approximately 1.5 to 2.0 per 1,000 births in New Mexico. There is a higher incidence in our state be due to ethnic and genetic factors. The highest incidence of clefts is found in Native Americans and Hispanics. Based on our own epidemiological studies, there may be as many as 40 to 50 children born each year in New Mexico with a cleft.

Of all clefts, approximately

- 25% will have associated syndromes
- 20% will have significant airway or feeding difficulties
- 25% will involve cleft lip only
- 50% will involve cleft lip and palate
- 25% will involve cleft palate only

DIAGNOSIS AND CLASSIFICATION

When a baby is born with a cleft, it is important to establish a precise diagnosis. Children will appear to have missing tissue or often be mistaken to have a midline defect. Close inspection will reveal the true nature and extent of the cleft. Tissue is misplaced, but not necessarily missing.

Questions to ask:

- Is the defect unilateral or bilateral?
- Does it involve the lip alone, palate alone, or both lip and palate?
- Is the defect complete or incomplete?
- Are there any associated syndromes?

GENETICS AND RISK OF CLEFT LIP & PALATE

- If this is your first child with a cleft,
  - The overall risk for another sibling or offspring = 4%
- If more than one immediate family member is affected,
  - The overall risk for another sibling or offspring = 10-16%
EMBRYOLOGY AND CAUSATION
The face develops in the first trimester of pregnancy between the 5th and 9th weeks as various parts fuse to form the face. Failure of fusion is the reason that clefts of both the lip and palate occur. But we do not know the exact cause. There is no know environmental factor, although there can be a genetic association. For the vast majority of cases, a cleft is a single event and it should be remembered that the baby is normal in every way and that restoration is possible so that he or she can lead a normal, healthy life.

PRIORITIES in CLEFT MANAGEMENT
At birth:
- Coping
- Adapting
- Feeding
- Preparing for surgery

After birth:
- Appearance
- Speech
- Hearing
- Dental

“The goal of treatment is to provide optimal results in terms of appearance, speech, hearing and dental outcomes”.

FEEDING
Initially, feeding may be difficult due to the inability to achieve suction and maintain intra-oral negative pressure since there is an open connection between the oral and nasal cavities.

FAMILY COUNSELING
It is imperative that a member of our team meet with the parents as soon as the baby is born to assist in feeding, often in the delivery room or during hospitalization. During consultation we review various aspects of clefts and show before-and-after pictures in preparation for the first surgery.

ULTRASOUND DIAGNOSIS
Many mothers are now finding out about their baby’s cleft while still pregnant. With newer techniques in ultrasound, the details of the face can be determined. As soon as an ultrasound diagnosis is made a meeting is held with the expectant mother and family to provide support and give information. Knowing what to expect can be very helpful.
TYPES OF CLEFTS

Clefts can be unilateral or bilateral, involve the lip alone, lip and palate or just the palate. All share common features of failure of fusion of lip or palatal elements.

CLEFT PALATE AND VARIATIONS:
The typical cleft is a defect in the hard and soft palates. It may begin at the gum line and extend to the back of the palate, causing a split or gap. The muscles controlling the movement of the palate, known as the levators, are disrupted and abnormally placed, allowing air and food to escape into the nose. Cleft palate is repaired at 9 months.

Submucous Cleft Palate - A condition in which the uvula is split and it appears that the palate is intact, when, in fact the muscles and underlying structures are clefted. Repair is often indicated if there is risk of abnormal speech development. Many times these cases are diagnosed late when the child is 6 to 7 years old. Any child with hypernasal speech should undergo evaluation by a trained cleft specialist.

Robin Sequence - A condition in which babies are born with an excessively short mandible or jaw, along with a very wide cleft of the palate, often called a “U-shaped” cleft. These babies sometimes require respiratory and feeding support shortly after birth. As the child grows, the mandible tends to grow as well. Cleft palate repair may be delayed until 10 to 14 months.

22q11 deletion syndrome with or without cleft palate - this is an increasingly diagnosed spectrum of conditions also known as Velocardiofacial Syndrome, Stickler’s Syndrome, DiGeorge Syndrome and others – all are characterized by hypernasal speech. Therapy and sometimes surgery can be helpful.

UNILATERAL CLEFT LIP (WITH OR WITHOUT CLEFT PALATE)
In the unilateral cleft lip, the defect involves only one side, extending from the gum, through the lip and into the nose. In some cases, a small band is present at the base of the nose, sometimes called an “incomplete” cleft lip. The muscles of the mouth and lips are split and do not form a sphincter so when the baby cries, the lip actually opens up. In addition, there is a gap in the bone of the maxilla through the gum and gingiva. This is addressed when your child is 6-8 years old. The columella of the nose is smaller and the entire nose can appear displaced or crooked including a deviated septum. These nasal deformities are corrected when the child is older. Lip repair is usually done at 3 months of age.

BILATERAL CLEFT LIP (WITH OR WITHOUT CLEFT PALATE)
The bilateral defect is the most severe form of clefting. In this deformity, there are two gaps extending from the gum to the nose. The central part of the lip, called the prolabium, has nothing to hold it back so it tends to protrude. After repair, the prolabium will mold back into a more normal place. The orbicularis muscle of the mouth is widely split and will be realigned in the midline at the time of repair. The nasal deformity is greater with a small columella and displaced nostrils. Bilateral cleft lip repair is usually done at 4-6 months of age.
Types of Clefts

Unilateral Cleft Lip

Bilateral Cleft Lip

Cleft Palate
CLEFT CLASSIFICATION and RESULTS
examples shown are cases done by Dr. Cuadros at Presbyterian Hospital

Unilateral Cleft Lip & Palate (complete)

Unilateral Cleft Lip & Palate (incomplete)

Bilateral Cleft Lip & Palate (complete)
SURGERY

The two most important surgeries for your child will take place in the first year of life. Timing and technique of surgery are critical to successful outcomes in terms of speech, hearing, dental and appearance.

REPAIR CLEFT LIP - AGE 3-5 MONTHS
The lip is repaired when the baby is 2½ to 3 months old for unilateral and 4 to 5 months for bilateral cleft lips. Performing surgery at this age insures that the immune system, airway, respiratory system and blood counts are strong enough to tolerate surgery and anesthesia.

The goals of surgical correction are to create a pleasing harmonious lip and eliminate the stigmata of cleft lip deformity, avoid secondary deformities and additional surgeries. This is done by using the triangular flap repair developed by Tennison and Randall. The technique involves reconstituting lip height, realignment of the orbicularis muscle, recreating the Cupid’s Bow of the lip by aligning the white roll, creating a vermillion tubercle, releasing and realigning the nostril while maintaining an adequate labial sulcus. Sometimes minor revisions are necessary at a later time.

Surgery takes 3 hours and includes closure of the most anterior portion of the hard palate with vomer flaps. An otologist usually inserts PE tubes in the ears at this time. Baby stays in the hospital with the mother in the hospital for 1-2 nights. Special feeders are provided for the first week when the baby cannot use a bottle. Skin sutures are removed at 7 days in the operating room under light anesthesia.

REPAIR CLEFT PALATE - AGE 9 MONTHS
Studies have shown that 9 months is the ideal time for cleft palate repair in terms of better speech results and fewer complications. This is done before meaningful speech patterns develop and healing is complete by the time the baby begins to form words. At this stage, the entire palate is closed. Vomer flaps are used to close the anterior palate at the time of the lip repair.

The goal of palate surgery is to restore normal anatomy in order to achieve as normal speech as possible and to eliminate the stigmata of cleft palate hypernasal speech. The main defect associated with the cleft palate is an open communication between the nasal and oral cavities. Mucosal deficiency is present and the palate is shortened with the muscles of the soft palate displaced. They are split, retracted and have an abnormal insertion onto the posterior margin of the palate rather than in the midline. Repair consists of realignment of speech muscles, especially the levator veli palatini. Most commonly used technique is the V to Y lengthening and retropositioning with mucoperiosteal flaps. (Veau-Wardill-Kilner). This is done by mobilizing flaps from the sides. This lengthens the palate, closing the gap while repositioning the muscles.

This technique results in normal or near-normal speech in as many as 85% of patients.
ANESTHESIA, HOSPITALIZATION AND RECOVERY

Babies and children with clefts are managed by an experienced team of pediatric specialists. All surgery is done at Presbyterian Hospital. The anesthesiology staff at Presbyterian Hospital includes fellowship-trained specialists using state-of-the-art techniques especially designed for infants and children. For most surgeries, the baby or child will remain hospitalized for one to two nights, until feeding has returned to normal. Infants will be fitted with soft restraints on the arms, they will be fed with a special feeding bottle called a Zip-n-Squeeze. For lip repairs, sutures are removed the following week by placing the baby under light anesthesia. All palate repairs are done with dissolving sutures, and no suture removal is required. A small pack is placed in the palate, which will fall out on its own. After surgery the baby will be admitted with IV fluids, antibiotics, and small doses of narcotics for pain. When the baby can feed fully, he or she will be switched to oral medications. Pain after surgery is well controlled in this way, but many babies will be fussy and irritable. Drainage and low grade fever is normal after surgery. Most bottle feeding can be resumed after one week. You will be given detailed instructions on wound care, diet and follow-up. Recovery and healing generally takes 3 weeks.

ADDITIONAL SURGERY

ALVEOLAR BONE GRAFT - AGE 5-8 YEARS

Babies born with cleft lip and palate may also have a cleft in the bone of the maxilla separating the upper teeth with a gap. This gap needs to be filled to allow the permanent teeth to erupt. A bone graft to the gap in the gum will be required in cases of complete unilateral or bilateral cleft lip and palate. This operation is performed by an Oral & Maxillofacial Surgeon optimally between the ages of 5 and 6 years old in order obtain maximal results. The bone is harvested from the hip through a small incision and leaves no deficit. The bone graft is placed in the gap of the gum (or aoveolus) as a place for the adult teeth to grow. Children with cleft palate only will not need this surgery.

SECONDARY SURGERY AND MAJOR REVISIONS - ANY AGE

After initial lip and palate repairs, revisions may be required at any age to improve appearance or speech. Minor revisions of the lip are done as an outpatient. Major revisions of the lip or palate will require more extensive surgery and hospitalization. If a child had surgery done elsewhere, we will perform a thorough evaluation to determine if additional revisional surgery will be of benefit.

ORTHODONTICS (BRACES) ANN OTHER FACIAL SKELETON ABNORMALITIES

Children with clefts exhibit a wide variety of facial skeleton and dental abnormalities from malocclusion to gross maxillary deficiency. These defects consist of hypoplastic maxilla on the cleft side and malalignment of the dento-alveolar arches. With a bilateral cleft, the defects are more severe and the premaxilla is often grossly deficient in bone. Dental abnormalities include supernumerary teeth, dystrophic teeth, congenitally missing teeth and malocclusion in nearly all patients. Ectopic teeth may erupt into the cleft. Surgical treatment with alveolar bone graft is performed by an Oral & Maxillofacial surgeon
between ages 5-8 years to allow permanent teeth to grow. A maxillary expander is sometimes placed prior to bone graft. When the permanent teeth erupt, orthodontic braces are then applied to realign the teeth. If maxillary retrusion or severe malocclusion occur, further orthognathic surgery may be required at age 15-18 years.

**RHINOPLASTY FOR NASAL ABNORMALITIES - AGE 16-18 YEARS**
One of the most visible cleft abnormality is the nose. The nasal abnormality consists of deficient and displaced cartilage structures, deviated nasal septum and tip abnormalities. Partial correction is obtained at the initial lip repair. Further corrections may be done at age 4 to 6 years, with the final correction occurring at age 16 to 18 years in the form of a complete reconstructive rhinoplasty. After full skeletal maturity in the teenage years, the final operation to be performed is a complete rhinoplasty and septoplasty to reshape the nose.

**SPEECH AND HEARING**

**HEARING ISSUES**
Virtually all patients with a cleft involving the palate (with or without cleft lip) will develop middle ear effusions due to abnormal drainage of the Eustachian tube. If untreated, this can lead to chronic ear infections and permanent hearing loss. Therefore, all patients with clefts are evaluated early by an Otologist (an ENT who specializes in hearing) for the need for ventilation tubes (PE tubes or BMT). The majority will demonstrate fluid build up and require tubes to be placed at the time of lip and/or palate surgery. With this aggressive approach, most children can expect normal hearing.

**SPEECH THERAPY**
By age 12-14 months, after the repair of the cleft palate, the child will gradually begin to speak, first with a few words and then with sentences. This is the critical time for speech development. A speech therapist will monitor for any signs of language, speech and hearing problems. If there is any question of speech problems, the child may be referred for further testing including videofluoroscopy and nasendoscopy. Speech results are better with early recognition of surgically correctable problems. The most common problems we see are language delay and velopharyngeal insufficiency, or VPI. VPI is a result of abnormal healing or scarring of the palate, and may need a second operation to correct. It is vital that a Speech Therapist trained in cleft palate monitor the child.

**COMPREHENSIVE VIDEO SPEECH AND NASENDOSCOPY ANALYSIS**
All our patients with cleft palates are evaluated on a yearly basis by the doctor and a trained speech therapist. In patients who are suspected of having velopharyngeal insufficiency, or VPI, a detailed video speech analysis and nasal endoscopy may be required. If abnormalities persist, a second surgery on the palate or pharyngeal flap may be required.
SURGICAL REPAIR OF CLEFT LIP AND PALATE

UNILATERAL CLEFT LI REPAIR - The Tennison-Randall triangular flap repair is used at 3-4 months of age. This involves repairing the three layers of the lip: the inner, the muscle and the outer skin. There is partial correction of the nose. Repair of the anterior portion of the hard palate is done at this time. Outer sutures are removed at 7 days.

BILATERAL CLEFT LIP REPAIR - The Manchester technique is use to repair a bilateral cleft at age 5-6 months. The central prolabial segment is fit in between the mobilized lateral segments. The anterior hard palate is repaired on both sides and there is partial correction of the nose. Outer sutures are removed at 7 days.

CLEFT PALATE REPAIR - Repairing the soft palate involves a technique known as “V to Y push-back.” It is done at 9 months of age. Palatal flaps are created from tissues inside the mouth. These flaps are mobilized and shifted inward and backward to restore length and mobility, vital for speech. The split levator muscle is repaired in the midline and a single uvula is created. All sutures are dissolving.
The three phases of cleft care are:

1. Early Repairs (Birth to 1 yr) - includes feeding and preparation for surgeries
2. Speech & Hearing (age 1-8) - includes speech therapy
3. Dental (age 6-16) - includes orthodontics

In the first year of life, there will be two major operations:

- Age 3 months - Repair of cleft lip (including AHP), first set of PE tubes
- Age 9 months - Repair of cleft palate, second set PE tubes

After that, may need 1-3 additional procedures depending on type and severity of cleft:

- Age 5-8 years - Alveolar bone graft
- Age 15-18 - Maxillary advancement
- Age 15-18 - Rhinoplasty
CLEFT PALATE TEAM

CLEFT PALATE CENTER CLINIC AND TEAM
The New Mexico Cleft Palate Center is certified and approved by the American Cleft Palate Association. We have established a system in which children are seen at our individual private offices. Here we can spend the required time to perform a personal and thorough evaluation of your child. We recommend that you register with Dr. Cuadros and his team. We will then make the appropriate referrals and follow-ups.

“Our team currently performs over 100 primary cleft lip & palate surgeries per year and over 300 total surgeries total for cleft and craniofacial, including plastic, ENT and dental”.

OUTREACH CLINICS - GALLUP, SHIPROCK AND LAS CRUCES
Our team is responsible for outreach clinics in Gallup and Shiprock with the assistance of local providers and volunteers. In addition we attend a clinic in Las Cruces through NMSU to serve patients in southern New Mexico. Please call our office 1-505-243-7670 to register for any of these clinics.

INSURANCE AND PAYMENT ISSUES
Dr. Cuadros and the members of the cleft palate team are committed to taking care of all children with clefts regardless of payment source. Dr. Cuadros is contracted with all major insurance carriers, HMO’s, Centennial programs, CMS and Medicaid. In the management of clefts, there should be no barriers to offering these children the best care possible. Additional support for lodging, transportation and feeding supplies are available.

DR. CUADROS - CREDENTIALS AND EXPERIENCE
Dr. Cuadros has been in practice in New Mexico since 1988. He is a graduate of Columbia University and trained at Harvard Medical School. He is a member of the American Society of Plastic Surgeons and American Cleft Palate Association. He has been a consultant for Healing the Children, member of Operation Smile and a partner with Smile Train. He has been a provider of cleft care for over 20 years and is considered an expert in the surgical management of Cleft Lip and Palate. Dr. Cuadros has dedicated his life to helping these children and families and improving their standard of care in New Mexico.
CLEFT AND CRANIOFACIAL SERVICES AT PRESBYTERIAN HOSPITAL

Presbyterian Hospital has advanced and sophisticated specialists available to treat patients with cleft and craniofacial anomalies, including Pediatric Surgery, Oral and Maxillofacial Surgery, ENT, Otology, and Pediatric Dentistry. Presbyterian services include advanced pediatric care such as Perinatology, Cardiology, Gastroenterology, Pulmonary, and Pediatric and Neonatal Intensive Care Units.

Our data indicates that outcomes at our institution are at or even above national standards for cleft care set forth by the American Cleft Palate Association. Several innovative and state-of-the-art techniques are used at Presbyterian including videoscopic monitoring during surgery, distraction osteogenesis and the use of purified platelet-rich plasma.

OTHER REFERRALS

We treat any and all patients of any age. Including those seen at other cleft clinics, families that have recently moved to New Mexico, patients adopted from other countries. We will provide second opinions and follow up for any age.

In addition, we work closely with other providers and clinics throughout the state and country including University of New Mexico Hospital, New Mexico State University, Indian Children’s Program, and Children’s Medical Services. We also work with the Craniofacial Center in Dallas, Texas for more advanced and complex craniofacial problems.

“It must be remembered that true excellence in cleft lip and palate treatment is dependent on a dedicated multi-disciplinary approach in which the surgeon's performance over time is primary in determining the success or failure of the overall treatment. Experience and objective analysis are paramount in determining which procedures, sequencing, or timing protocol gives improved results”

Kenneth E. Salyer, MD - Dallas, Texas.
Special Editorial - Excellence in Cleft Lip and Palate Treatment
SPECIALISTS INVOLVED IN CLEFT CARE:

Anesthesiologist
Audiologist
Dental Hygienist
Developmental Specialist
Dietician
Dysmorphologist
Feeding Specialist
Endocrinology
Genetics Counselor
Insurance Case Manager
Lactation Specialist
Neonatologist

Nutritionist
Neurosurgeon
Nurses
Obstetrician
Operating Room Nurses
Ophthalmologist
Oral & Maxillofacial surgeon
Orthodontist
Otolaryngologist
Otolologist
Parent Volunteer

Pediatric Surgeon
Pediatric Intensivist
Pediatrician
Pedodontist (Dentistry)
Perinatologist
Plastic Surgeon
Psychologist
Radiologist
Social Worker
Speech Therapist

OTHER ANOMALIES AND ASSOCIATED CONDITIONS
In addition to cleft lip & palate, the following conditions have been seen and treated:
(some of these may or may not involve clefts)

22q11.2 Deletion Syndrome
Aarskog Syndrome
Amniotic Band Syndrome
Apert Syndrome
Beckwith Wiedman Syndrome
Binder Syndrome
Charge Association
Craniosynostosis
Crouzon Syndrome
DiGeorge Syndrome
Ear Tags
EEC Syndrome
Encephalocele
Fetal Alcohol Syndrome
Fronto-Nasal Dysplasia
Goldenhar Syndrome
Goltz Syndrome
Kabuki Syndrome
Hemifacial Microsomia

Holoprosencephaly
Lateral Orofacial Cleft
Lemli Smith Optiz Syndrome
Marshall Syndrome
Microtia
Nasopharyngeal Teratoma
Recombinant 8 Syndrome
Robin Sequence
Robinow’s Syndrome
Romberg’s Disease
Schprintzen Syndrome
Stickler’s Syndrome
Syndactyly
Tessier Cleft
Torticollis
Trisomy 21 (Downs Syndrome)
VATER Syndrome
Velocardiofacial Syndrome
22q11.2 Deletion Syndrome
Feeding a newborn baby with a cleft may be difficult at first due to the inability of the baby to maintain suction because of the open connection between the mouth and nose. Despite the problems with maintaining sucking pressures, the swallowing mechanisms in children with cleft palate are usually normal. Therefore, if the milk or formula can reach the back of the throat allowing the natural swallowing reflexes can move it into the esophagus and stomach. Some nasal regurgitation may occur and is normal. More upright positioning during feeding will help reduce the occurrence of nasal regurgitation. All babies have different abilities, likes and dislikes. The urge to feed is strong, and the best technique is quickly determined. Sometimes it requires patience, time and determination but eventually all babies will learn to feed. Babies need time to strengthen the muscles of the mouth, tongue and throat. Be creative and resourceful!

PREPARATION BEFORE BIRTH - If you know by ultrasound diagnosis that your baby has a cleft, we will arrange for a special visit in the office to review feeding techniques as well as provide you with a feeding kit. As soon as you begin labor, or if a C-section has been scheduled, please contact the office. When the baby is born we would like to know the exact weight of your baby and the extent of the cleft. We can then assist you with feeding and making preparations for surgery.

"Cleft feeding supplies are sometimes difficult to obtain, therefore we will provide nipples and bottles to all parents at no charge. Please contact our office and we will provide as much as you need".

BREAST FEEDING AND BREAST MILK - It should be emphasized that breast feeding is not possible when there is a cleft of the palate. In all cases mothers will need to use a special feeder to deliver breast milk or formula. Babies with isolated cleft lip may be able to breast feed, but it is unlikely that a child with a cleft palate will be able to successfully breast feed because of nasal regurgitation and the difficulty in maintaining an adequate suction.

TECHNIQUE OF FEEDING - Initially there will be a period of trial and error until the baby and mother find the best bottle and technique. The three main choices for feeders include: Pigeon nipple, Medela Special Needs Feeder (Haberman), or Mead-Johnson Enfamil Cleft Palate Nurser. Most mothers and babies prefer the Pigeon nipple, but some will use the Haberman particular if baby is small with a weak sucking mechanism. Other products to consider include NUK nipple and Dr. Brown feeder. The Pigeon and Dr. Brown feeders have a one-way valve mechanism allowing the baby to actively compress the nipple thereby strengthening the jaw and mouth muscles. The other feeders are passive and have to be squeezed manually by the mother. Infant should be held slightly upright at about 45 degrees in the "football hold" position. Feedings will be more frequent and take longer. Consult your pediatrician for the proper calories and formula your baby needs. A feeding specialist can be very helpful.
IN THE HOSPITAL - Shortly after birth, an examination by a pediatrician will be performed. Please inform our office of the exact weight and extent of the cleft, especially whether or not the palate is involved. We will also ask about the results of the newborn hearing screen. During hospitalization, a feeding or lactation specialist may be involved. We strongly support the use of mother’s breast milk, but if the baby has a cleft palate, breast feeding will not be possible. We urge you to go to the special feeders immediately after birth using pumped breast milk or formula to avoid weight loss and prolonged hospital admission. In some cases, the baby not be able to receive enough nutrition by oral means and may require a temporary gavage feeding tube placed through the nose and admission to the NICU.

WEIGHT GAIN AFTER BIRTH - It is critical that the baby's weight be monitored closely. If in the first few days, the baby's intake is not sufficient, then a feeding tube may be necessary and the baby observed for additional days in the hospital. If the baby has other birth problems, longer hospitalization may be required also. Most babies with clefts are discharged one to two days after birth. After release from the hospital, the weight will be monitored closely for any feeding difficulties and adjustments can be made. Rarely, if weight gain is insufficient, hospital re-admission or intervention by our specialty feeding clinic may be necessary. It is important to ensure that the energy that a child expends during feeding does not exceed the nutritional and caloric intake from the feeding. This problem may occur if feeding takes more than 30 minutes. Steady weight gain is the most important indicator of adequate food intake. Close follow-up with a pediatrician or other health care provider is necessary to ensure that consistent weight gain is achieved.

FEEDING AFTER CLEFT LIP AND PALATE SURGERY - Surgery for the lip is performed at age 3-6 months. The palate is repaired at age 9-10 months. On the night before surgery you will be given instructions on what and when to feed. The usual allowed is clear liquids 2 hours, breast milk 4 hours; and formula 6 hours before arrival time. We will provide you with special feeders that will not irritate the surgical site. These include a syringe and Zip-N-Squeeze bottle. A sippy cup can be used also. You may wish to try these feeders prior to surgery so the baby can adjust to the new feeders.

On the day of surgery, the baby will be allowed clear liquids, sugar water, Pedilyte, or mothers breast milk beginning in the recovery room. The following day, the formula is mixed 50/50 with clear liquid and on the second day the baby can have full formula. If you are using breast milk, bring some to the hospital on the day of surgery. Most babies are discharged on the first or second day after surgery as soon as adequate oral intake has been achieved. Suture removal for cleft lip repairs is done seven days after surgery at the hospital under light mask anesthesia. Cleft palate repairs do not require suture removal. For one week after the lip and palate surgeries, your baby will not be able to use the Pigeon, Medela, or any other bottle or pacifier. All babies can resume full regular diet, bottles, nipples and pacifiers one week after surgery.
The Pigeon nipple is the most commonly used by mothers. A one-way valve allows the baby to actively “gum” the nipple to obtain milk or formula.

Best way to hold baby while feeding is at a 45 degree angle. Feedings should be slower and more frequent.
RESOURCES for PARENTS and HEALTH CARE PROVIDERS

For referrals and information call Dr. Cuadros at any time. Our office is available at any time to discuss issues regarding cleft management. We will arrange for consultation, provide feeding information and supplies.  
505-243-7670 or toll-free in New Mexico 1-888-217-6120.  
8232 Louisiana NE, Suite A, Albuquerque, NM 87113  
http://www.NMcleft.org info@cNMcleft.org

Gallup and Shiprock Outreach Cleft Palate clinics - serving the Four Corners area of New Mexico. The New Mexico Cleft Palate Center sponsors outreach clinics for patients living in the Four Corners regions, including Gallup, Shiprock, Farmington and local communities. These clinics are free of charge and open to all patients of all age. Please contact us for information and clinic dates. Info@NMcleft.org  
505-243-7670 or toll free in New Mexico 1-888-217-6120.

Las Cruces NMSU Cleft Palate Clinic - Meets twice yearly in March and November  
New Mexico State University Cleft Palate Clinic; call 575-646-3906.

DONATIONS TO THE CLEFT PALATE EDUCATION FUND

A charitable fund has been established through the New Mexico Medical Foundation to help with education resources for patients, parents and providers. The fund provides educational materials and learning experiences to improve the care of children in New Mexico. Please make out checks to New Mexico Medical Foundation and send to:  
New Mexico Medical Foundation  
c/o NMMS Cleft Palate Education Fund  
316 Osuna NE, Suite 501  
Albuquerque, NM 87107  
Or, you can contact the office of Dr. Luis Cuadros for more information

SmileFest!

An annual celebration to honor kids born with a cleft and to provide support to their families! Invitation and RSVP required. The purpose of this event is to provide these children and their families with the support and companionship needed to help them cope with feeding difficulties, surgeries and self esteem issues and to help them build lifelong friendships with other children who have faced similar challenges. It is important that each of these children and their families know that they are special and that their smile has a story to tell. Krista Sullivan is a registered nurse that works at Presbyterian Hospital, but more importantly a mom of a child born with a cleft lip and palate. If you are interested in attending the Annual SmileFest, please contact:  
KRISTA SULLIVAN, RN  
720 4th Street NE Rio Rancho, NM 87124  
Tel: (505) 891-0782 Fax: (505) 891-1011  
www.smilefestnm.com  
E-mail: kknfavillus@q.com
Albuquerque PROVIDER CONTACT LIST FOR PATIENTS

Pediatric Dentistry
Stephen Cito DDS
3900 Eubank Blvd. NE
Albuquerque, NM 87111
(505) 298-5522

Pediatric Dentistry
David Martinez DDS
7500 Holly Ave NE
Albuquerque, NM 87113
(505) 314-0645

Pediatric Dentistry
Spencer Tasker DDS
8201 Golf Course Rd NW # C3
Albuquerque, NM 87120
(505) 892-9010

Orthodontics
Lisa King DDS
8300 Carmel Ave NE, Suite 403
Albuquerque, NM 87122
(505) 299-7678

Orthodontics
Dana M. Casaus, DDS
5910 Cubero Dr. NE, Ste. D
Albuquerque, NM 87109
(505) 508-4939

Pediatric Dentistry
Tamera Coffman, DDS
8220 Louisiana Blvd NE Suite A
Albuquerque, NM 87113

Oral Surgery
Lionel Candelaria DDS
John Mitchell DDS
6800A Montgomery NE
Albuquerque, NM 87109
(505) 881-1130

Oral Surgery
Gregory McGee, DMD
Rio Grande Oral Surgery
8228 Louisiana Blvd NE, Suite B
Albuquerque, NM 87113
(505) 821-2111

Oral Surgery
Robert C. Urquhart, DDS
8400 Osuna Rd NE #4b,
Albuquerque, NM 87111
(505) 554-2575

Plastic Surgery
Luis Cuadros MD, FACS
8232 Louisiana NE, Suite A
Albuquerque, New Mexico 87113
(505) 243-7670

Speech Therapy
Chatterbox Speech Therapy
5701 Carmel Ave. N.E Ste. # B
Albuquerque, NM 87113
(505) 821-1638

Speech Therapy
Laura Sheline, M.S., CCC-SLP
Presbyterian Ear Institute
415 Cedar St SE
Albuquerque, NM 87106
(505) 224-7020

ENT - Otology/Hearing
Karl Horn, MD
Randy Murphy, Aud
Ear Associates
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