DOWNLOAD PDF WHEN A CHILD IS BORN WITH A CLEFT

Chapter 1 : Cleft Palate Team

CDC recently estimated that, each year in the United States, about 2, babies are born with a cleft palate and 4, babies are born with a cleft lip with or without a cleft palate. 1 Isolated orofacial clefts, or clefts that occur with no other major birth defects, are one of the most common types of birth defects in the United States. 1.

Cleft lip a separation in the upper lip and cleft palate a split in the roof of the mouth are the most common types of conditions that affect the skull and face. Each year, the conditions affect one in every to babies born in the United States, according to Cleftline. More than 70 percent of babies born with a cleft lip also have a cleft palate. Although no one knows exactly what causes clefts, some medical specialists believe that family history and environmental factors such as medications or vitamin deficiencies play roles. Genetic Factors The likelihood of having a child who has a cleft increases slightly if a mother is older than 35 years old while she is pregnant. Either parent can pass on the gene or genes that cause clefts. Biological children of a parent who has a cleft have a 4- to 6-percent chance of also having clefts. Prevalence Clefts occur more often among the Asian population and among certain groups of Native Americans. They occur less frequently among African Americans. More males have cleft lip or cleft lip with cleft palate; however, more females have cleft palate alone. Mild clefts might appear as a notch in the lip. Severe clefts can cause a large opening from the lip through the nose. Unilateral cleft lip occurs on one side of the lip. With a unilateral cleft lip, a gap appears under one nostril and the nose might slightly tilt or look lower than normal. Bilateral cleft lip occurs on both sides of the lip. With a bilateral cleft lip, a deep split might extend from the lip into both nostrils, causing the nose to look broader and shorter than normal. Complete clefts involve the entire lip, and often, the part of the jawbone that holds the teeth also known as the alveolar arch. Incomplete clefts involve part of the lip. Cleft palates can extend from the front of the mouth to the throat and range from mild to severe. Because the palate is inside the mouth, cleft palates are less noticeable than cleft lips. However, a cleft lip often accompanies a cleft palate. Cleft Lip and Palate Symptoms and Effects Beyond affecting how your child looks, clefts might cause other complications, including: Feeding Difficulties If your infant has a cleft lip, you might need to use a special bottle or nipple, or get special instructions for breastfeeding. If your infant has a cleft palate, sucking to eat might be a challengeâ€”your baby might gag, choke, or breathe liquid into their lungs aspirate while feeding. Ear Infections and Hearing Loss If your baby has a cleft palate, ear infections and hearing loss are possible because fluid can build up in the middle ear. Getting your child proper treatment when they are an infant or young child can help avoid permanent hearing loss. If your child has a cleft palate, they might develop speech more slowly. A cleft palate impacts speech because the palate may not function properly to touch the back of the throat when speaking; therefore, air escapes and the voice sounds nasally. Your child might have difficulty producing some consonant sounds. After cleft-palate repair, most children eventually develop normal speech, although some need speech therapy or additional surgery. Some children with cleft palates also lack teeth. Dental and orthodontic care can help most children who have cleft palates. Cleft Lip and Palate Diagnosis In some cases, an ultrasound can diagnose cleft lip and palate before your baby is born. Cleft lip is easily noticeable because it affects the area between the lip and nose. Because cleft palate occurs inside the mouth, it may not be visible at firstâ€”and it might not be diagnosed until your baby has feeding difficulties or other symptoms. No matter when your biological or adopted child is diagnosed, Gillette will work with you to discuss cleft lip treatment and cleft palate treatment that will help your child. Cleft Lip and Palate Repair and Treatment Cartilage molds easily during the first six weeks after birth. The retainer also can improve sucking and eating abilities while your child waits for surgery. The parts that touch the mouth or nose are soft acrylic, making it easier for your baby to wear. Once a monthâ€”until the first surgery takes place, at about 3 monthsâ€”we make a new appliance that fits as your child grows. Undergoing fewer surgeries reduces risks and complications, such as those associated with anesthesia. Cleft lip surgery typically happens when your baby is about 3 months old. In addition to improving appearance and function, goals of surgery include: Closing the cleft lip. Creating adequate distance between the upper lip and nose. Cleft Palate Repair By closing the opening in the roof of the mouth, this repair creates the floor of the nasal cavity. It typically occurs

when your baby is 9 to 12 months old. Some children who have cleft palates will need additional surgeries as they developâ€”to help with speech, improve the appearance of the lip, close openings near the mouth or add bone to the upper gum to allow for proper gum development. When the cleft also affects the shape of the nose, additional procedures after age four can help to: Improve symmetry between the nostrils. Create an adequate length of tissue separating the nostrils. Minimize the appearance of a flattened tip of the nose or a nose that pulls downward. Most older children who have clefts will need ongoing orthodontia care while permanent teeth come in, and speech and language therapy to improve speech abilities after repair surgery. Our comprehensive treatment plans can start at birth or whenever your child arrives in your family.

Chapter 2 : Cleft lip and cleft palate | March of Dimes

cleft lip and cleft palate together â€" more common in boys Usually, cleft lip is found when a baby is born, although some are seen on a prenatal ultrasound. A cleft palate is more difficult to see until the inside of a child's mouth is examined carefully after birth.

Babies and children with cleft lip and cleft palate may have feeding, speech, hearing and dental problems. Take a multivitamin with folic acid in it each day to help prevent cleft lip and cleft palate in your baby. Most babies with cleft lip and cleft palate can have surgery early in life to repair cleft lip and palate. What are cleft lip and cleft palate? These birth defects are called oral clefts or orofacial clefts. Birth defects are health conditions that are present at birth. They change the shape or function of one or more parts of the body. Birth defects can cause problems in overall health, how the body develops or how the body works. Cleft lip and cleft palate are common birth defects. About 1 or 2 in 1, babies less than 1 percent are born with cleft lip and palate each year in the United States. Cleft lip and cleft palate happen very early in pregnancy. Boys are twice as likely as girls to have cleft lip with or without cleft palate. Girls are more likely than boys to have cleft palate without cleft lip. Some babies with a cleft lip have just a small notch in the upper lip. Others have a larger opening or hole in the lip that goes through the lip and up into the nose. Having a cleft in the middle of the lip is rare. A cleft palate can affect the soft palate the soft tissue at the back of the roof of the mouth or the hard palate the bony front part of the roof of the mouth. In some babies with cleft palate, both the front and back parts of the palate are open. In other babies, only part of the palate is open. What causes cleft lip and cleft palate? They may be caused by a combination of things, like genes and things in your environment, like what you eat or drink and medicines you take. Genes are passed from parents to children. These things may increase your chances of having a baby with cleft lip or palate: Family history of cleft lip and cleft palate. Family history is health conditions and treatments that you, your partner and everyone in your families. Cleft lip and cleft palate are more common in families who are Asian, Hispanic and Native American. If you have a family history of cleft lip or palate, tell your health care provider and a genetic counselor. Smoking or drinking alcohol during pregnancy. Women who binge drink during the first weeks of pregnancy are more likely to have a baby with a cleft lip or cleft palate than other women. Binge drinking is when you drink four or more drinks in 2 to 3 hours. Not getting enough nutrients , like folic acid , before and during pregnancy. Folic acid is a vitamin that every cell in your body needs for healthy growth and development. If you take folic acid before pregnancy and during early pregnancy, it can help protect your baby from cleft lip and palate and birth defects of the brain and spine called neural tube defects. Having diabetes before pregnancy. Diabetes is a condition in which your body has too much sugar called glucose in the blood. Diabetes before pregnancy is also called preexisting diabetes or type 1 or type 2 diabetes. Taking certain medicines during pregnancy. Epilepsy is a seizure disorder that affects how the nerve cells in your brain work. A seizure is when the whole body or parts of the body move without control. Being obese during pregnancy. Having certain infections during pregnancy, like rubella also called German measles What can you do to help prevent cleft lip and cleft palate in your baby? Before pregnancy, take a multivitamin with micrograms of folic acid in it every day. During pregnancy, take a prenatal vitamin with micrograms of folic acid in it every day. Alcohol includes beer, wine and liquor. Get a preconception checkup. Get to a healthy weight before pregnancy and talk to your provider about gaining a healthy amount of weight during pregnancy. Talk to your provider to make sure any medicine you take is safe during pregnancy. When you do get pregnant, get early and regular prenatal care. Prenatal care is medical care you get during pregnancy. Protect yourself from infections. Talk to your provider to make sure all your vaccinations are up to date, especially for rubella. Vaccinations help protect you from certain infections. Stay away from people who are infected. Wash your hands often. How are cleft lip and cleft palate diagnosed? Most babies are diagnosed with cleft lip or cleft palate after birth. Some babies with certain types of cleft palate may not be diagnosed until later in life. Ultrasound is a prenatal test that uses sound waves and a computer screen to show a picture of your baby inside the womb. What problems can cleft lip and cleft palate cause for your baby? Babies and children with cleft lip or cleft palate may have:

Chapter 3 : Cleft Lip and Palate | What to Expect

A cleft lip occurs when there is a split or opening in the lip. This opening can be small or large enough to connect the upper lip and nose. A cleft palate occurs when the roof of the mouth does.

About birth defects A birth defect is a problem that occurs when a baby is developing in utero in the womb. Approximately 1 out of every 33 babies in the United States is born with a birth defect. Birth defects can be minor or severe. They may affect appearance, organ function, and physical and mental development. Most birth defects are present within the first three months of pregnancy, when the organs are still forming. Some birth defects are harmless. Others require long-term medical treatment. Severe birth defects are the leading cause of infant death in the United States, accounting for 20 percent of deaths. Birth defects can be a result of: Genetics The mother or father may pass on genetic abnormalities to their baby. Genetic abnormalities occur when a gene becomes flawed due to a mutation, or change. In some cases, a gene or part of a gene might be missing. A particular defect may be present throughout the family history of one or both parents. Nongenetic causes The causes of some birth defects can be difficult or impossible to identify. However, certain behaviors greatly increase the risk of birth defects. These include smoking, using illegal drugs, and drinking alcohol while pregnant. Other factors, such as exposure to toxic chemicals or viruses, also increase risk. All pregnant women have some risk of delivering a child with a birth defect. Risk increases under any of the following conditions: Common birth defects Birth defects are typically classified as structural or functional and developmental. Structural defects are when a specific body part is missing or malformed. The most common structural defects are: These often cause disabilities of intelligence or development. Functional or developmental birth defects include metabolic defects, sensory problems, and nervous system problems. The most common types of functional or developmental birth defects include: Down syndrome , which causes delay in physical and mental development sickle cell disease , which occurs when the red blood cells become misshapen cystic fibrosis , which damages the lungs and digestive system Some children face physical problems associated with specific birth defects. However, many children show no visible abnormalities. Defects can sometimes go undetected for months or even years after the child is born. How are birth defects diagnosed? Many types of birth defects can be diagnosed during pregnancy. A healthcare professional can use prenatal ultrasounds to help them diagnose certain birth defects in utero. More in-depth screening options, such as blood tests and amniocentesis taking a sample of the amniotic fluid , may also be done. These tests are usually offered to women who have higher-risk pregnancies due to family history, advanced maternal age, or other known factors. A physical examination and hearing test may also help the doctor diagnose birth defects after the baby is born. A blood test called the newborn screen can help doctors diagnose some birth defects shortly after birth, before symptoms occur. A screening test can also falsely identify defects. However, most birth defects can be diagnosed with certainty after birth. How are birth defects treated? Treatment options vary depending on the condition and level of severity. Some birth defects can be corrected before birth or shortly after. Other defects, however, may affect a child for the rest of their life. Severe birth defects, such as cerebral palsy or spina bifida, can cause long-term disability or even death. Medications may be used to treat some birth defects or to lower the risk of complications from certain defects. In some cases, medication may be prescribed to the mother to help correct an abnormality before birth. Surgery can fix certain defects or ease harmful symptoms. Some people with physical birth defects, such as cleft lip, may undergo plastic surgery for either health or cosmetic benefits. Many babies with heart defects will need surgery, as well. Parents may be instructed to follow specific instructions for feeding, bathing, and monitoring an infant with a birth defect. How can birth defects be prevented? Women who plan to become pregnant should start taking folic acid supplements before conception. These supplements should also be taken throughout the pregnancy. Folic acid can help prevent defects of the spine and brain. Prenatal vitamins are also recommended during pregnancy. Women should avoid alcohol, drugs, and tobacco during and after pregnancy. They should also use caution when taking certain medications. Some medications that are normally safe can cause serious birth defects when taken by a pregnant woman. Make sure to tell your doctor about any medications you may be taking,

including over-the-counter drugs and supplements. Most vaccines are safe during pregnancy. In fact, some vaccines can help prevent birth defects. There is a theoretical risk of harm to a developing fetus with some live-virus vaccines, so these kinds should not be given during pregnancy. You should ask your doctor which vaccines are necessary and safe. Maintaining a healthy weight also helps reduce the risk of complications during pregnancy. Women with pre-existing conditions, such as diabetes, should take special care to manage their health. If your pregnancy is considered high risk, your doctor can do additional prenatal screening to identify defects. Depending on the type of defect, your doctor may be able to treat it before the baby is born. Genetic counseling A genetic counselor can advise couples with family histories of a defect or other risks factors for birth defects. Genetic counselors can determine the likelihood that your baby will be born with defects by evaluating family history and medical records. They may also order tests to analyze the genes of the mother, father, and baby.

Chapter 4 : Cleft Lip and Cleft Palate

When a child is born with an opening in the roof of the mouth, it is called a cleft palate (Picture 1). The palate or roof of the mouth has two parts: the hard palate in the front of the mouth and the soft palate in theinnatdunvilla.com hard palate is the bony part that is attached to the skull.

The movie has touched many, including Dr. Michael Stosich , a Grayslake craniofacial orthodontist expert who has experience working with children born with craniofacial abnormalities like the main character of the movie. Craniofacial orthodontics is a sub-specialty of the orthodontic field that focuses on treatment of patients born with birth defects, most commonly cleft lip and palate. Stosich is the cleft lip and palate team orthodontist and the craniofacial orthodontist at the University of Chicago medical center. This requires him to collaborate with a host of other specialists, including those in craniofacial surgery, speech, ENT, neurosurgery, genetics, social work and psychology to ensure total patient centered care. Many patients that Dr. Stosich and the team work with are treated from birth into their late teens. Stosich works with some of the most talented plastic surgeons on complex orthognathic surgery for adult patients. But, the greatest joy I get is from the amazing patients I get the opportunity to work with each day. The strength and beauty of each of these patients is found in who they are, and they inspire me every day to continue to pursue excellence in my field. What is cleft lip and palate, and how does it occur? An orofacial cleft occurs when a baby is born with an opening in the lip or roof of the mouth also known as the palate. A cleft lip can look like just a small opening at the corner of the lip, or it can extend into the nose and into the gums. Cleft lip along is more common in boys, cleft palate alone is more common in girls. Cleft lip and palate together is more common in boys. A unilateral cleft is found on only one side of the mouth, while a bilateral cleft is found on both sides. It may not always be known to the doctor why a cleft occurred, but they are often thought to be a combination of genetic and environmental factors. If it is hereditary, the gene or genes that cause it can be passed down by either parent. A research team has discovered that a mutation on chromosome nine may be responsible for birth defects, including cleft lip and palate. The gene is known as FOXE1. The exact mutation has not yet been found, but researchers believe there is a variation in the genetic code that contributes to the mutation. Additionally, exposure to certain chemicals while pregnancy could lead to a cleft. Smoking, doing drugs and drinking while pregnancy can also lead to an increased risk of birth defects. Women who binge drink during the first weeks of pregnancy have a higher risk of having a baby with a facial defect such as cleft lip or palate. How are clefts treated? If your child has a cleft lip or palate, he or she will be treated by a team of doctors. The team typically includes your pediatrician, as well as a plastic surgeon; oral surgeon; ear, nose and throat specialist; orthodontist or craniofacial orthopedic specialist; dentist, and other specialties as needed. Cleft lip surgery can be performed when a child is three to six months old, but should be performed initially before 12 months of age. The surgeon will close the separation in the lip by making incisions on both sides of the cleft. This creates flaps of tissue that can then be stitched together to create a more normal looking lip, and allow it to function properly. Cleft palate surgery should occur before 18 months of age, but typically between nine and 12 months. A surgeon may use different procedures, depending on the type of cleft palate the child presents. The surgeon will make invisions on both sides of the cleft, then work to reposition the tissue and muscles before stitching the incision closed. Surgery will happen in a hospital under general anesthesia. Surgery can not only improve the appearance, but also the ability to eat, breath and talk normally. Follow up surgeries may be required to help improve appearance or to improve speech. As your child grows, his or her facial structure will change, so these additional surgeries can help address any issues that may arise. Bone grafts create stability for permanent teeth, and is usually done between the ages of six and For some children, cleft lip and palate may not be detected until birth. However, for some, an ultrasound may show a possible defect. A cleft lip can begin to show in ultrasound around the 13th week of pregnancy, and may become more apparent as the baby grows. If a doctor believes a cleft is there, an amniocentesis test can be done. This tests the amniotic fluid for genetic issues that could cause a defect. However, in many cases, clefts are not detected until birth. The Center for Disease Control estimates that approximately 2, babies are born with cleft palate and 4, babies are born with

cleft lip cleft palate may or may not also be present each year. How can cleft lip or palate affect a child? There are several issues that can arise in a baby or child with a cleft lip or palate. Feeding issues may occur, but feeding strategies, including using bottle with special nipples, can help. However, if there is a gum and lip cleft, feeding may be more challenging. Breastfeeding a child with a cleft palate will be more challenging, unless the palate is in the back of the mouth and very small. A lactation consultant or cleft nurse specialist can help, but nursing sessions are typically most successful when done in 10 minute sessions. For many infants with cleft palates, a mother may need to pump and bottle feed. If you choose to bottle feed, you will most likely need specially designed bottles to ensure your infant is getting the proper nutrition. Small, frequent feedings are most effective in the first several weeks. The infant should be held in a more upright position to ensure milk cannot drain into the opening the cleft creates in the nose. The infant will need to be burped frequently during feedings. Your child may also require speech therapy to correct difficulties in speaking. In children who only have a cleft lip, speech will generally be typical or close to typical. Cleft palate alone or cleft lip and palate can lead to difficulties with speech. Children may also require orthodontic treatment to adjust their teeth and bites. While the orthodontic methods used to treat a child with cleft lip or palate are the same as a child without, a child with a cleft may have other issues present that will require monitoring from an even earlier age. Clefts can lead to missing, malformed, or malpositioned teeth, and will require care by someone well versed in the treatment of clefts. For some children, the first orthodontic visit may occur before any teeth are even present in the mouth. This will allow the orthodontist to assess the facial growth of the child. As the teeth begin to erupt, the orthodontist can make a plan for the dental and orthodontic needs. Some children may require early interventive treatment to allow for the most effectively functioning bite. The orthodontist will work in close conjunction with the surgeon to help ensure the best outcome. Children with cleft palates are also at an increased risk for ear infections than children without. The eustachian tube allows the fluid inside the near to drain into the back of the nose. But because children with cleft palate have muscles and tendons in abnormal positions, the tube cannot drain the ear properly. Children with cleft palates should have regular hearing checks, and ear tubes may be recommended. Can cleft lip or palate be prevented? Genetic mutations that can cause clefts cannot be prevented. However, pregnant women can take some precautions to try to eliminate environmental exposure that may lead to clefts. Eat a balanced diet and ensure you are getting proper vitamin intake especially folic acid. Do not take medications without first getting approval from your doctor, do not smoke, do not do illegal drugs, avoid contact with anyone who has an infectious disease. Is cleft lip or palate treatment covered by insurance? Many parents who have sought treatment for their children discover that insurance may deny treatment, at least in the beginning. Many insurances attempt to classify treatment as plastic or reconstructive surgery. However, many of the treatments associated with a cleft lip or palate should be covered by insurance. To determine what your insurance will cover, it is important to examine your specific policy. Ask your insurance provider for the Evidence of Coverage documents. Within this will also be exclusions, which are the things your insurance is not required to cover. Cosmetic procedures may be included in this, so procedures your child needs may be denied initially. It is important for you to understand why these procedures are medically necessary so that you can appeal any denials that you believe should in fact be covered. Your medical team will also have staff available who are well versed in insurance coverage and who can help you get the most out of your insurance. Stosich and his team at iDentity Orthodontics work hard every day to ensure a patient-centered approach to treatment. They are dedicated to providing exceptional care to every patient. To learn more about Dr. Stosich and craniofacial orthodontics, call iDentity Orthodontics today at Michael Stosich Michael S. Stosich, DMD, MS, MS, is a specialist orthodontist for children and adults with subspecialty expertise in robotically assisted orthodontics.

Chapter 5 : Facts about Cleft Lip and Cleft Palate | Birth Defects | NCBDDD | CDC

Karly was born with a condition called cleft lip and palate. As a child, she had several operations to fix the problem. Today the only sign of those surgeries is a slight scar on her upper lip.

There is a gap in the middle of the roof of the mouth. If your child has a cleft palate but not cleft lip, it may not be noticeable at first. This is true especially if the gap is covered by soft tissue that lines the roof of the mouth. This is called a submucous cleft palate. Diagnosing Cleft Lip and Palate Sometimes cleft lip and palate are diagnosed before a baby is born, during a routine ultrasound. Learn more about how our Prenatal Counseling team can help you prepare. In most cases, cleft lip and palate are diagnosed after birth. Cleft lip will be obvious when the doctor examines your baby. With the right technique and help, most often your baby can learn to feed very well. If your baby has a cleft lip or palate, our nurses and infant feeding specialists can help you learn ways to feed your baby. Examples are van der Woude syndrome , 22q For many babies, the syndrome is caused by a new genetic change that was not inherited from the mother or father. But sometimes a parent has an abnormal gene that is passed on to their child. Our Craniofacial Genetics Clinic helps identify syndromes. Our genetic counselors help families understand the benefits and limits of genetic testing. Your doctor or our genetic counselors can talk with you about the likelihood for your family. Parents often need help with feeding if their baby has a cleft. Cleft lip makes it hard for the baby to make a seal with their lips around the nipple. Most often, babies with cleft lip can be fed by breast or regular bottle. We can give you tips on how to hold your baby for better feeding. With a cleft palate, the baby cannot get enough suction to suck milk out of the breast or regular bottle. When they suck, the roof of their mouth does not close off the mouth from the nose. Babies with cleft palate usually need special bottles and nipples. We can help you understand the different types. We will teach you feeding techniques so your baby eats enough to grow and thrive. Taping and nasoalveolar molding to improve results of surgery For children with wide clefts, we reshape the gums, lip and nose using taping or nasoalveolar molding NAM before cleft lip surgery. It also lifts and shapes the nose. A better result with the first surgery could mean fewer surgeries later in childhood. In the months before surgery, your baby wears a custom-made molding plate that fits on the gum line. Every 1 to 2 weeks, an orthodontist on our team adjusts the molding plate. Over time, the cleft gets smaller. The orthodontist slowly adjusts the post to shape the nose cartilage, lift up the nose and open the nostril. Our Craniofacial team is developing a new way to improve the shape of the nose before surgery. SAM may decrease the number of visits your child needs to improve the symmetry of their nose before surgery. We are making the device available to doctors at other centers around the country to improve cleft care for all children. Surgery to repair cleft lip is most often done when your child is 6 months old. During surgery, the skin, muscle and lining of the lip are put in the proper place. The nose is also treated at the time of the first surgery, but often needs another small surgery as your child grows. Most often, surgery takes about 3 hours. You will be able to be with your baby in the recovery room soon after they wake up from surgery. Your child will usually stay in the hospital 1 night. Bilateral cleft lip repair Before left: The skin needed to do the repair is present, but not in the right place or shape. Surgery puts the skin, muscle and cartilage into the correct position. After 1 year, the lip and nose have relaxed in the new position. The scars are visible as white lines. If there are concerns, an ear, nose and throat doctor otolaryngologist will see your child. Most children with cleft palate have fluid buildup behind the ear drum. This can make it harder to hear. If this is a problem for your child, we recommend inserting small plastic tubes in the ear drum. This keeps the middle ear clear of fluid. It is often done at the same time as surgery to fix cleft palate. Surgery for cleft palate If your child has a cleft palate, we do surgery when your child is between 9 and 15 months. During cleft palate surgery, the cleft is closed. Muscles at the back of the roof of the mouth soft palate are put in their proper place across the cleft. The goal is to create a palate that works well for speech. Most often, surgery takes 3 hours. Your child usually will stay in the hospital 1 to 2 nights. Cleft palate affects the muscles needed for normal speech. Your child may have trouble making correct speech sounds, even after the cleft is repaired. Some children with clefts have a condition called velopharyngeal dysfunction VPD. Often, speech therapy helps children develop more normal speech patterns.

Sometimes it helps to use a custom-made speech appliance called an obturator. It looks like a dental retainer with a small bulb at the back. Some children benefit from further surgery after cleft palate repair. This is likely if your child has a type of VPD called velopharyngeal insufficiency. Your surgeon and speech pathologist will work together to recommend what is best for your child. Dental and orthodontic treatment Tooth problems are more likely to happen in children with clefts than in other children. They are more likely to have teeth that are misshaped, crowded or missing. Children with clefts are at higher risk for cavities. The hard coating enamel on their teeth may have weak areas that decay easily. Careful tooth care is important, starting with baby teeth. Your child should have regular visits with your family dentist. Our orthodontists are a key part of the team. Your child is likely to need orthodontic treatment to align teeth if their cleft affects the gum line the hard palate or the back of the roof of the mouth soft palate. We coordinate dental and orthodontic needs with other treatments to get the best results. Orthodontic treatment helps prepare your child if they need surgery for a cleft in the part of the jaw that holds the teeth. The surgery is called alveolar bone graft. At 12 to 18 years, your child has final orthodontic treatment to correct their bite and align their teeth. For some children, this will include surgery on the jaws. Alveolar bone graft for upper jaw clefts Many children with cleft lip and cleft palate also have a cleft in the bone of the upper jaw that holds the teeth. This bone is called the alveolus al-vee-OH-liss. An alveolar bone graft is a surgery to fill the gap in that bone. Your child will probably need orthodontic treatment for several months to prepare for surgery. During an alveolar bone graft, the surgeon opens the gum tissue to show the gap in the bone. Bone marrow taken from inside the hip bone is put into the gap. Next, the surgeon puts gum tissue back over the bone marrow and stitches it closed. The cut in the hip is also stitched closed. After surgery, the bone marrow in the upper jaw will become hard and strong bone. The bone marrow that was taken from the hip will grow back. This happens within about 6 weeks. This surgery is done when your child is 6 to 9 years. Most often, surgery takes 2 hours. Your child will stay in the hospital 1 to 2 days. Rhinoplasty for clefts affecting the nose Surgery to repair cleft lip also treats problems with the nose. But some children need more surgery as they get older. A child with a cleft may have problems with breathing because the inside of their nose has not formed right. A deviated septum is one example. Most often, surgery to correct breathing issues and improve symmetry happens during the late teen years.

Chapter 6 : Cleft Lip & Palate Association

One in every babies is born with a cleft lip, a cleft palate, or bothâ€"making it one of the most common birth defects. Babies born with a cleft lip and/or palate need special care from a team of different health professionals. Their care must be well managed because of the difficult medical.

Kishan right was born with a cleft lip and palate Stories from Parents Many parents of children with a cleft have written about their experiences of diagnosis, birth, surgery and beyond. Most of these stories begin with diagnosis, and in the majority of cases the parents had no idea their child would be affected. Katie, from London, is one of many mums who walked out of her 20 week scan feeling very different to how she did going in: I have blurred memories of tissues and NHS tea. Of walking past all the other hopeful parents waiting for their scans with tears pouring down my face. Those are my memories of that day. Looking back now I can still feel the shock. We had no family history of cleft. Why had this happened? Now, I know how pointless and self-destructive these feelings were. The reasons why a baby is born with cleft are still murky to say the least. There is currently a huge national study into the causes of cleft, as so little is known about why 1 in babies are affected every year in the UK. I spent months blaming myself for something that was entirely out of my control. What it can mean. How it impacts on lives. How happy children can be despite being born with cleft. All I could think about was the cleft. There are around 1, babies born with a cleft every year in the UK alone, and many of their parents join the CLAPA Community to find others with similar experiences. You can find a Parent Supporter in your area , or search by a particular topic such as antenatal diagnosis. I needed to feel that I could do this â€" and that is exactly what Mel made me believe.

Chapter 7 : Cleft lip and cleft palate - Wikipedia

No matter when your biological or adopted child is diagnosed, Gillette will work with you to discuss cleft lip treatment and cleft palate treatment that will help your child. Cleft Lip and Palate Repair and Treatment.

Cleft lip may be unilateral or bilateral. A baby with a cleft lip may also experience a cleft in the roof of the mouth cleft palate. A cleft palate often includes a split cleft in the upper lip cleft lip but can occur without affecting the lip. Cleft lip and cleft palate are openings or splits in the upper lip, the roof of the mouth palate or both. Cleft lip and cleft palate are among the most common birth defects. They most commonly occur as isolated birth defects but are also associated with many inherited genetic conditions or syndromes. Having a baby born with a cleft can be upsetting, but cleft lip and cleft palate can be corrected. In most babies, a series of surgeries can restore normal function and achieve a more normal appearance with minimal scarring. Symptoms Usually, a split cleft in the lip or palate is immediately identifiable at birth. Cleft lip and cleft palate may appear as: This type of cleft often goes unnoticed at birth and may not be diagnosed until later when signs develop. Signs and symptoms of submucous cleft palate may include: Difficulty with feedings Difficulty swallowing, with potential for liquids or foods to come out the nose Nasal speaking voice Chronic ear infections When to see a doctor A cleft lip and cleft palate are usually noticed at birth, and your doctor may start coordinating care at that time. Normally, the tissues that make up the lip and palate fuse together in the second and third months of pregnancy. But in babies with cleft lip and cleft palate, the fusion never takes place or occurs only part way, leaving an opening cleft. Researchers believe that most cases of cleft lip and cleft palate are caused by an interaction of genetic and environmental factors. The mother or the father can pass on genes that cause clefting, either alone or as part of a genetic syndrome that includes a cleft lip or cleft palate as one of its signs. In some cases, babies inherit a gene that makes them more likely to develop a cleft, and then an environmental trigger actually causes the cleft to occur. Risk factors Several factors may increase the likelihood of a baby developing a cleft lip and cleft palate, including: Parents with a family history of cleft lip or cleft palate face a higher risk of having a baby with a cleft. Exposure to certain substances during pregnancy. Cleft lip and cleft palate may be more likely to occur in pregnant women who smoke cigarettes, drink alcohol or take certain medications. There is some evidence that women diagnosed with diabetes before pregnancy may have an increased risk of having a baby with a cleft lip with or without a cleft palate. Being obese during pregnancy. There is some evidence that babies born to obese women may have increased risk of cleft lip and palate. Males are more likely to have a cleft lip with or without cleft palate. Cleft palate without cleft lip is more common in females. In the United States, cleft lip and palate are reportedly most common in Native Americans and least common in African-Americans. Complications Children with cleft lip with or without cleft palate face a variety of challenges, depending on the type and severity of the cleft. One of the most immediate concerns after birth is feeding. While most babies with cleft lip can breast-feed, a cleft palate may make sucking difficult. Ear infections and hearing loss. Babies with cleft palate are especially at risk of developing middle ear fluid and hearing loss. If the cleft extends through the upper gum, tooth development may be affected. Because the palate is used in forming sounds, the development of normal speech can be affected by a cleft palate. Speech may sound too nasal. Challenges of coping with a medical condition. Children with clefts may face social, emotional and behavioral problems due to differences in appearance and the stress of intensive medical care. Prevention After a baby is born with a cleft, parents are understandably concerned about the possibility of having another child with the same condition. If you have a family history of cleft lip and cleft palate, tell your doctor before you become pregnant. Your doctor may refer you to a genetic counselor who can help determine your risk of having children with cleft lip and cleft palate. Use of alcohol or tobacco during pregnancy increases the risk of having a baby with a birth defect.

Chapter 8 : Cleft Lip and Palate

Researchers think that cleft lip and palate are caused by a combination of genes and environmental factors. Parents can pass on genes that cause cleft lip or palate â€" in some cases the cleft lip or palate is an isolated birth defect; in others, it is a part of a cluster of disorders.

Cleft lip is formed in the top of the lip as either a small gap or an indentation in the lip partial or incomplete cleft , or it continues into the nose complete cleft. Lip cleft can occur as a one-sided unilateral or two-sided bilateral condition. It is due to the failure of fusion of the maxillary and medial nasal processes formation of the primary palate. Unilateral incomplete Unilateral complete Bilateral complete A mild form of a cleft lip is a microform cleft. The soft palate is in these cases cleft as well. In most cases, cleft lip is also present. Cleft palate occurs in about one in live births worldwide. When cleft palate occurs, the uvula is usually split. It occurs due to the failure of fusion of the lateral palatine processes, the nasal septum, or the median palatine processes formation of the secondary palate. The hole in the roof of the mouth caused by a cleft connects the mouth directly to the inside of the nose. The top shows the nose, the lips are colored pink. For clarity the images depict a toothless infant. Incomplete cleft palate Unilateral complete lip and palate Bilateral complete lip and palate A result of an open connection between the mouth and inside the nose is called velopharyngeal inadequacy VPI. Because of the gap, air leaks into the nasal cavity resulting in a hypernasal voice resonance and nasal emissions while talking. Adolescents may face psychosocial challenges but can find professional help if problems arise. There is research dedicated to the psychosocial development of individuals with cleft palate. Self-concept may be adversely affected by the presence of a cleft lip or cleft palate, particularly among girls. However, as they grow older and their social interactions increase, children with clefts tend to report more dissatisfaction with peer relationships and higher levels of social anxiety. Experts conclude that this is probably due to the associated stigma of visible deformities and possible speech impediments. Children who are judged as attractive tend to be perceived as more intelligent, exhibit more positive social behaviors, and are treated more positively than children with cleft lip or cleft palate. It has been reported that elevated stress levels in mothers correlated with reduced social skills in their children. A cleft lip or cleft palate may affect the behavior of preschoolers. Experts suggest that parents discuss with their children ways to handle negative social situations related to their cleft lip or cleft palate. A child who is entering school should learn the proper and age-appropriate terms related to the cleft. The ability to confidently explain the condition to others may limit feelings of awkwardness and embarrassment and reduce negative social experiences. An adolescent with cleft lip or cleft palate will deal with the typical challenges faced by most of their peers including issues related to self-esteem, dating and social acceptance. Adolescent boys typically deal with issues relating to withdrawal, attention, thought, and internalizing problems, and may possibly develop anxiousness-depression and aggressive behaviors. Individuals with cleft lip or cleft palate often deal with threats to their quality of life for multiple reasons including: Complications A baby being fed using a customized bottle. The upright sitting position allows gravity to help the baby swallow the milk more easily Cleft may cause problems with feeding, ear disease, speech and socialization. Due to lack of suction, an infant with a cleft may have trouble feeding. An infant with a cleft palate will have greater success feeding in a more upright position. Gravity feeding can be accomplished by using specialized equipment, such as the Haberman Feeder , or by using a combination of nipples and bottle inserts like the one shown, is commonly used with other infants. A large hole, crosscut, or slit in the nipple, a protruding nipple and rhythmically squeezing the bottle insert can result in controllable flow to the infant without the stigma caused by specialized equipment. Individuals with cleft also face many middle ear infections which may eventually lead to hearing loss. The Eustachian tubes and external ear canals may be angled or tortuous, leading to food or other contamination of a part of the body that is normally self-cleaning. Hearing is related to learning to speak. Babies with palatal clefts may have compromised hearing and therefore, if the baby cannot hear, it cannot try to mimic the sounds of speech. Thus, even before expressive language acquisition, the baby with the cleft palate is at risk for receptive language acquisition. Because the lips and palate are both used in pronunciation, individuals with cleft usually need the aid of a

speech therapist. Cause The development of the face is coordinated by complex morphogenetic events and rapid proliferative expansion, and is thus highly susceptible to environmental and genetic factors, rationalising the high incidence of facial malformations. Five primitive tissue lobes grow: This may happen in any single joining site, or simultaneously in several or all of them. The resulting birth defect reflects the locations and severity of individual fusion failures e. The upper lip is formed earlier than the palate, from the first three lobes named a to c above. Formation of the palate is the last step in joining the five embryonic facial lobes, and involves the back portions of the lobes b and c. These back portions are called palatal shelves, which grow towards each other until they fuse in the middle. The biologic mechanisms of mutual recognition of the two cabinets, and the way they are glued together, are quite complex and obscure despite intensive scientific research. Many clefts run in families, even though in some cases there does not seem to be an identifiable syndrome present, [24] possibly because of the current incomplete genetic understanding of midfacial development. A number of genes are involved including cleft lip and palate transmembrane protein 1 and GAD1 , [25] One study found an association between mutations in the HYAL2 gene and cleft lip and cleft palate formation.

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Symptoms: The cleft can be mild (a notch on the upper lip) or severe (involving the lip, the floor of the nostril, and the dental arch). A child with a cleft palate usually needs a speech.

Luckily, there are many resources to learn about what we will be facing. A Cleft Lip is when only the lip is affected. This is known as a partial or incomplete cleft. Sometimes, the cleft may go all the way to the nose. This is known as a complete cleft. The soft palate also has a gap. If the cleft is noticed early, it is good to identify the doctors who will be helping your baby. What to Expect at Birth After birth, the primary concern is feeding. Babies can also be bottle fed. There are a few special bottles that can make feeding easier. Surgery is done to create a palate that is effective for speech. Children may need additional surgeries as they grow older and their facial structure changes. A bone graft may be done between 6 and 10 years old. As children near the teenage years, they may desire to make their scars less noticeable. They may also want to fix their bite, which can be done with orthognathic surgeries. It is important to start and maintain good dental habits. Several kids will have some type of orthodontic treatment. They may need braces to correctly position the teeth as they come in. Sometimes, the child will be missing a permanent tooth. Speech Issues Children with cleft lip typically have less speech issues than those with cleft palate. Social and Emotional Concerns Some children may have a hard time communicating with their peers. There are many ways to help them express themselves. If your child is being teased, it is important to teach them ways to handle themselves. In the end, having a child born with a special condition takes extra work. You can find her on Twitter , Pinterest and Facebook.