



my·Face

Transforming Lives: Diagnosis and Management of the Individual With Cleft Lip and Palate

myFace is pleased to collaborate with the American Cleft Palate Craniofacial Association (ACPA)
to present this educational program



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Welcome and Introductions



Dina Zuckerberg
Director of Family Programs
myFace



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Moderator



Patricia Chibbaro, MSN, CPNP
*Pediatric Nurse Practitioner
Consultant
myFace*



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Learning Objectives

- Define cleft lip and palate (including when it can be prenatally diagnosed)
- Describe the presurgical orthodontic management options
- Outline the possible surgical procedures required during the life of a child with a cleft lip/palate
- Identify the possible feeding and speech challenges for children with a cleft palate.



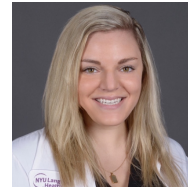
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Presentation



Roberto Flores, MD
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Director, Cleft Lip and Palate
Director, Craniofacial Surgery Fellowship
Hansjorg Wyss Department of Plastic Surgery
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*Speech Language Pathologist
myFace Center for Craniofacial Care at
NYU Langone Health
New York, NY*



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Disclosures

- **Roberto Flores, MD**
 - Smile Train – Global Medical Advisory Board
 - KLS Martin – Product Consultant
- **Meg Lico, MS, CCC-SLP, CLC**
 - Nothing to disclose



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Introduction

- Director of Cleft Lip and Palate – NYU
- Cleft Lip and Palate – Central Part of my Practice
- Over 15 years
- Teach and Lecture Internationally
- Global Medical Advisory Board – Smile Train



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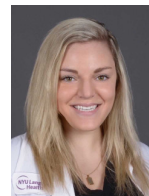
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Speech Language Pathologist



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Family Nurse Practitioner



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Craniofacial Orthodontic Fellow



Christie Ramiah
Photographer

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Multiple Interventions

Presurgical orthopedics
NAM, PLANA

Cleft lip repair
GPP

Palatal repair
Fistula, VPI

Alveolar reconstruction
Secondary alveolar graft

Jaw repositioning
Anterior pull head gear

Facial maturity surgery
Orthognathic surgery + rhinoplasty



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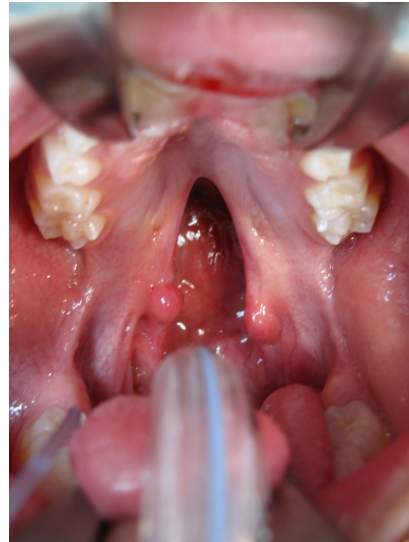


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Orthognathic surgery + rhinoplasty



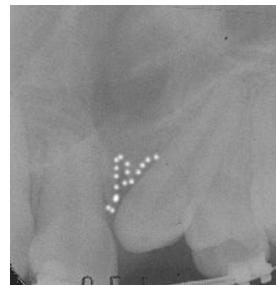
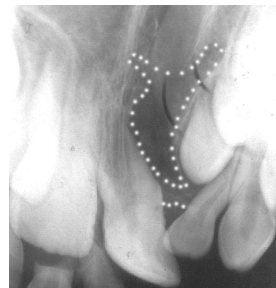
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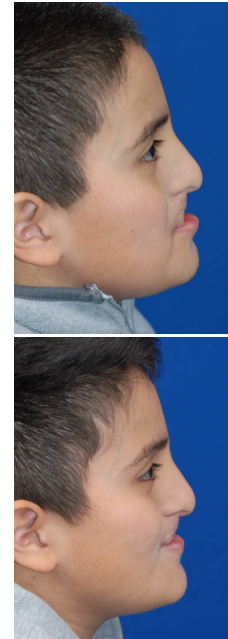


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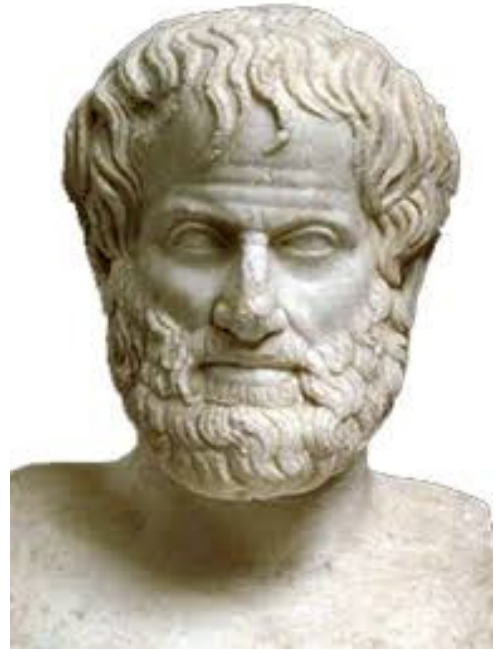


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Treatment Philosophy

- Best results possible
- Your child should look like an unaffected child
- Least amount of surgery
- All single-stage surgery
- Avoid prolonged surgery
- Avoid some procedures completely



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NasoAlveolar Molding



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NasoAlveolar Molding



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Developed at NYU
Greatest experience
Continue to improve
Customized approach
Fewer visits
Easier for babies and parents



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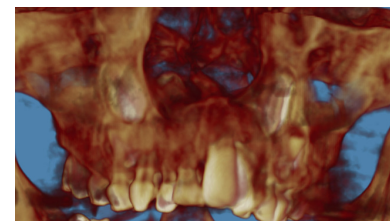
NasoAlveolar Molding



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Gingivoperiosteoplasty

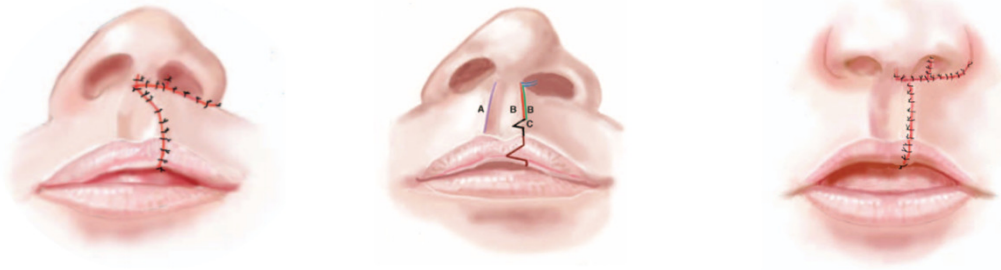
Gum repair
Done at cleft lip repair
Bone forms in the gums
Can avoid bone graft surgery
50% of cases
Big experience



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It's About the Scar Shape...and its Implications



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Primary Rhinoplasty

- Nasal repair should be performed on ALL patients
- NAM is NOT rhinoplasty
 - Molding therapy
 - Nose will relapse
- Cartilage repositioning critical to success
- Overcompensation of depressed lower lateral cartilage
 - Cartilage will fall over time
- Two rhinoplasty procedures
 - **Adequate vs. Inadequate PLANA**



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Scar Quality

- Surgeon
- Width of cleft
- Deformity of the nose
- How the repair is protected
- Biology of the child



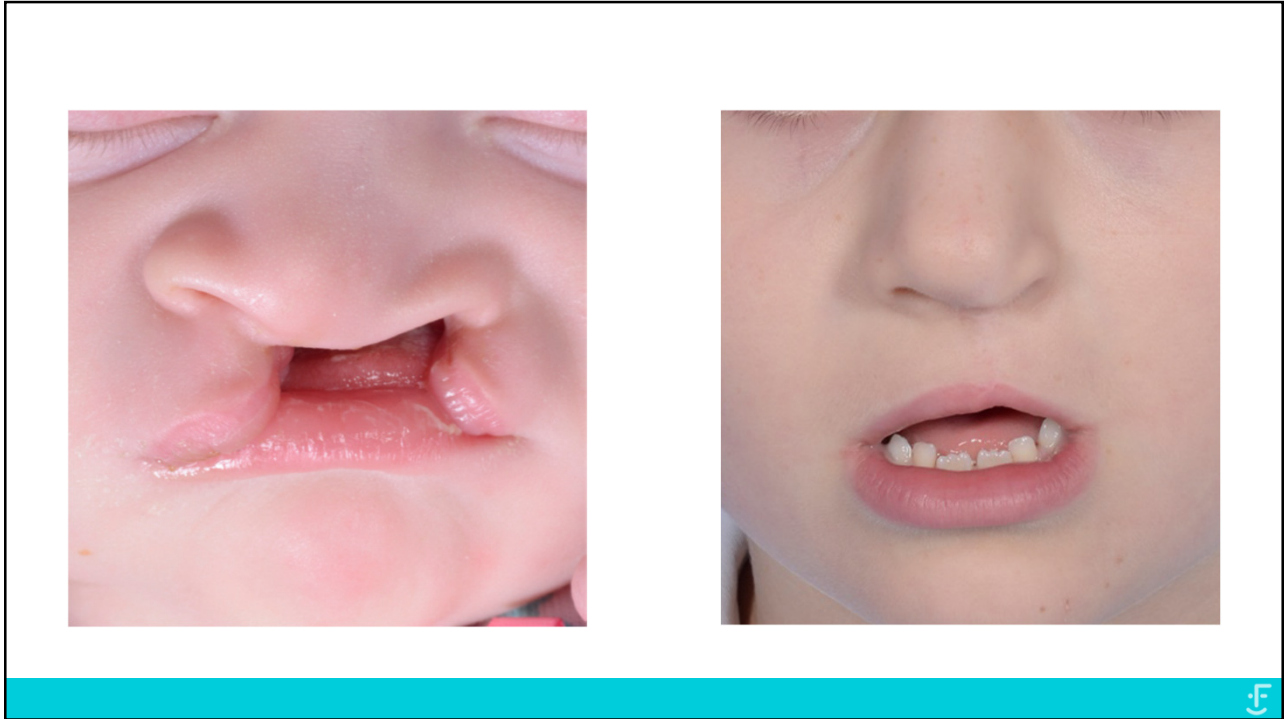
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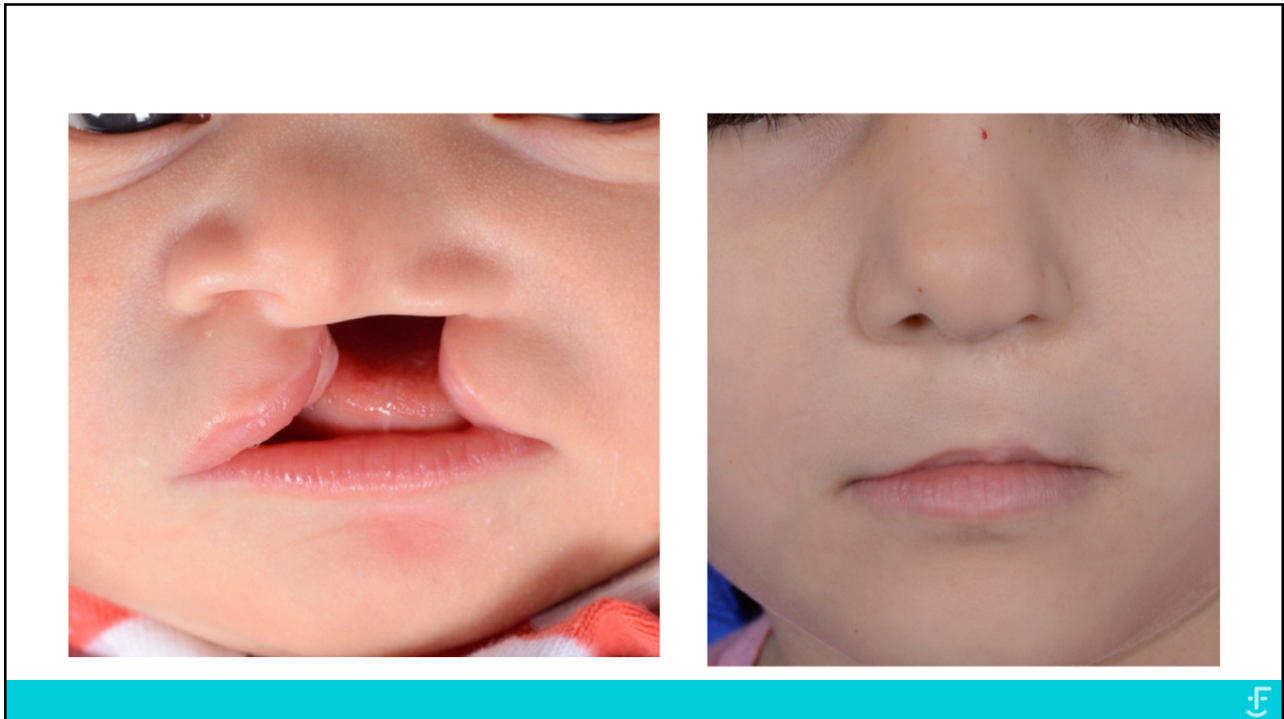
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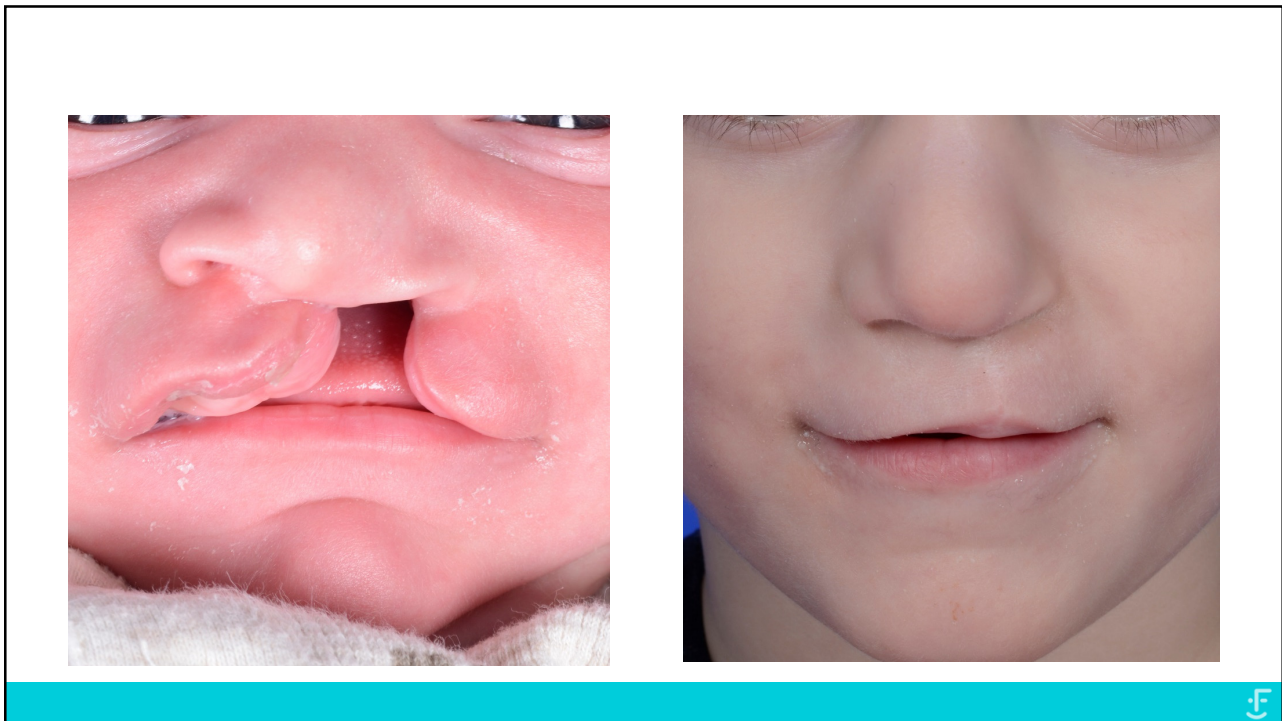
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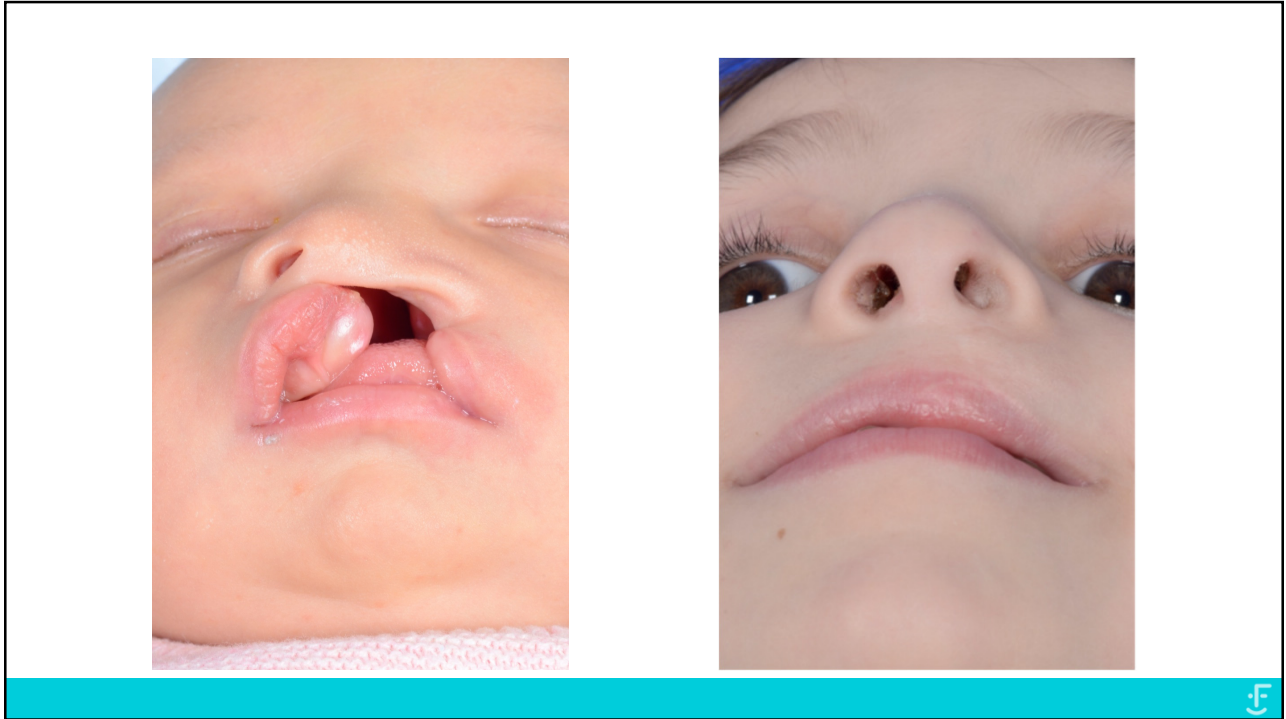
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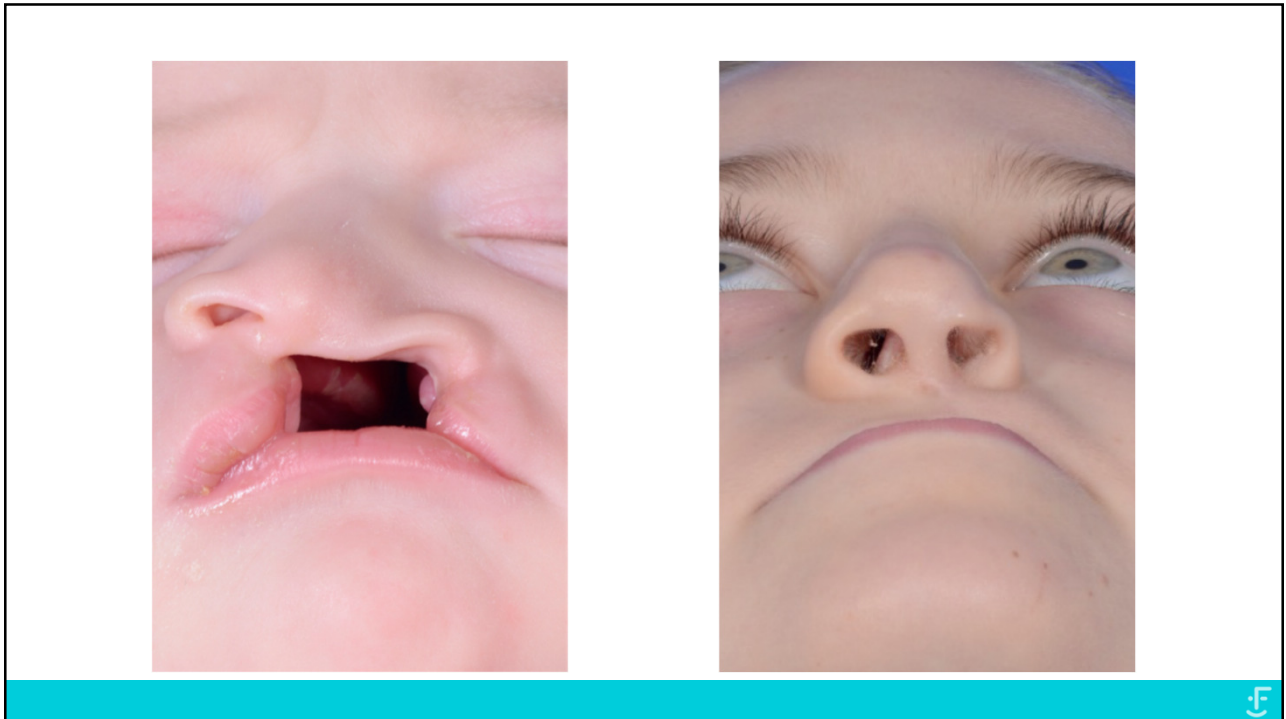
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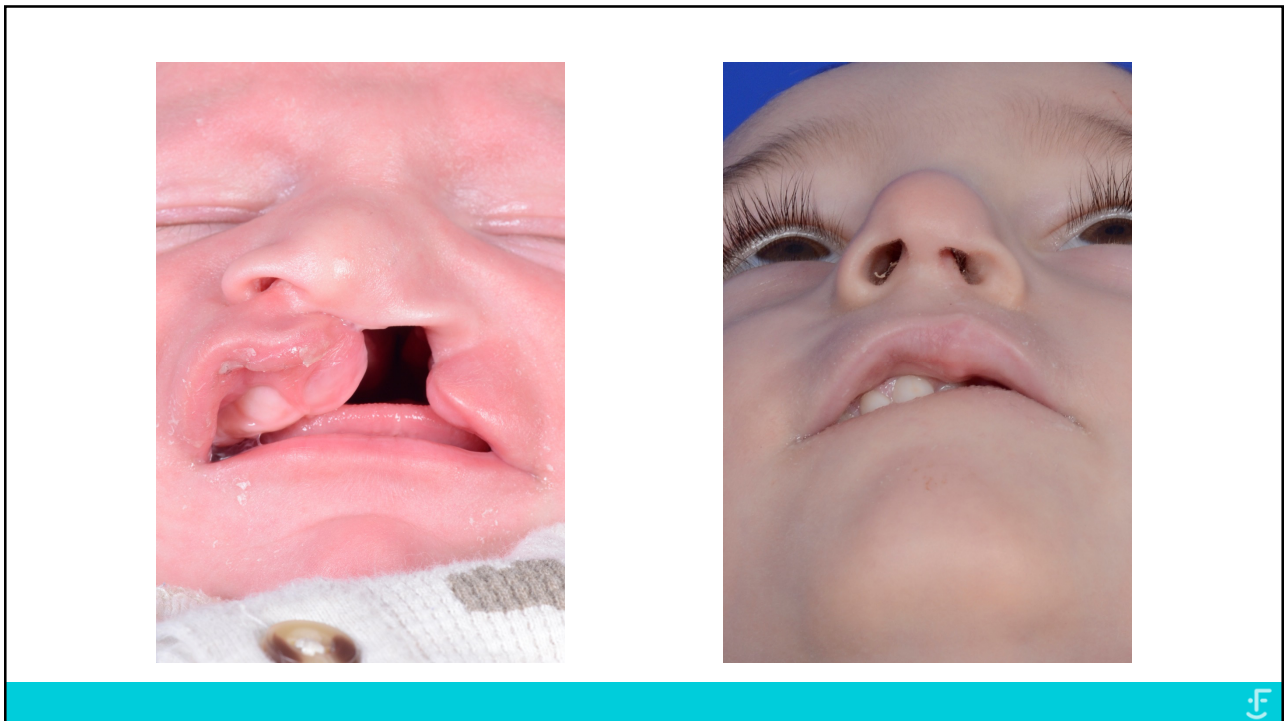
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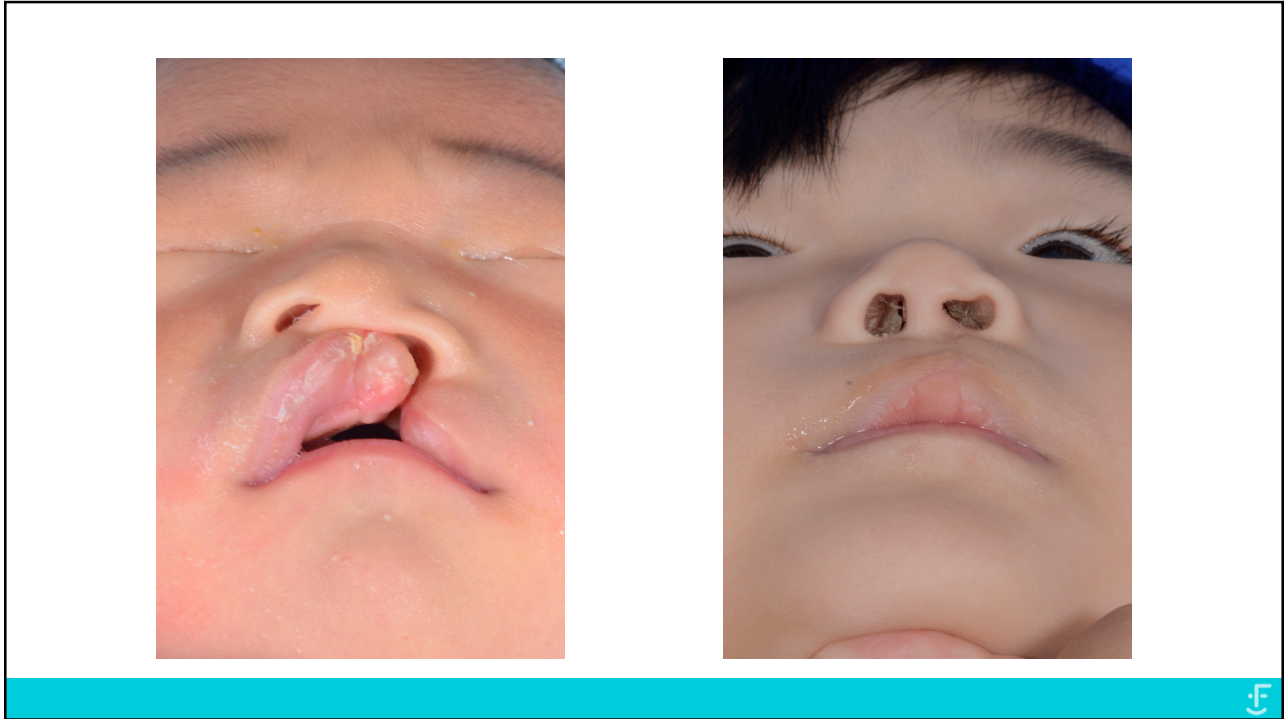
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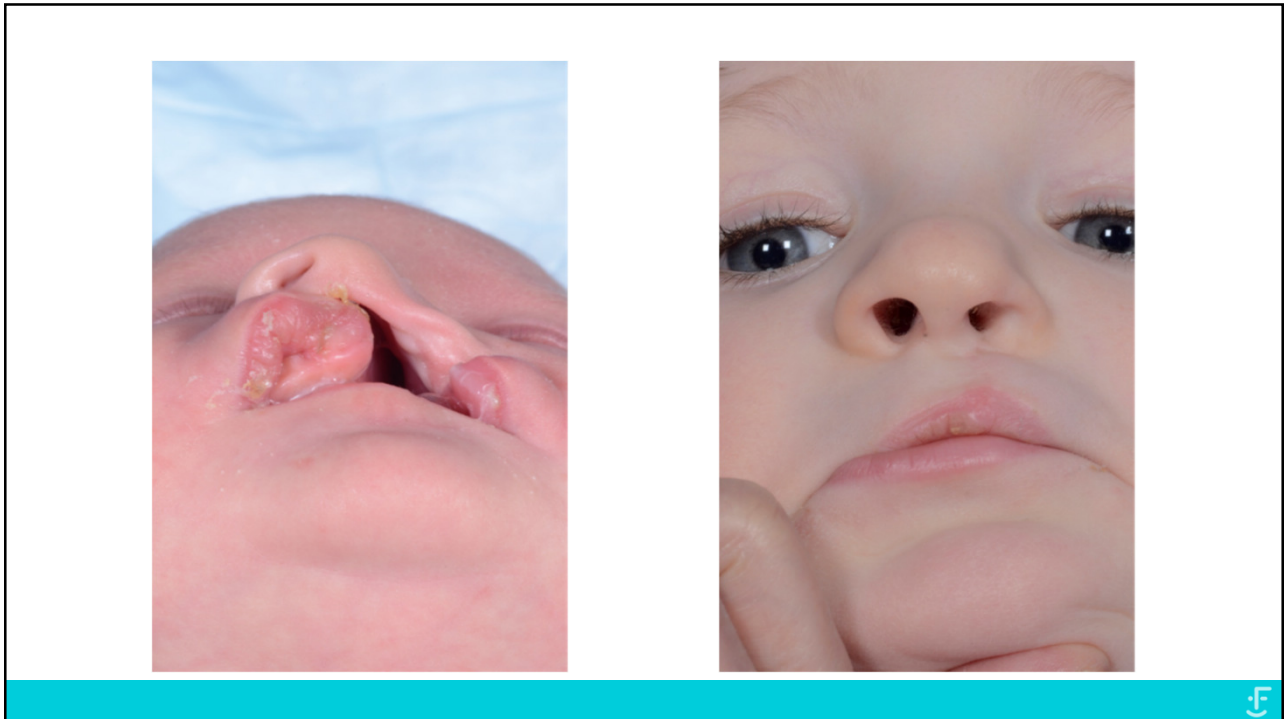
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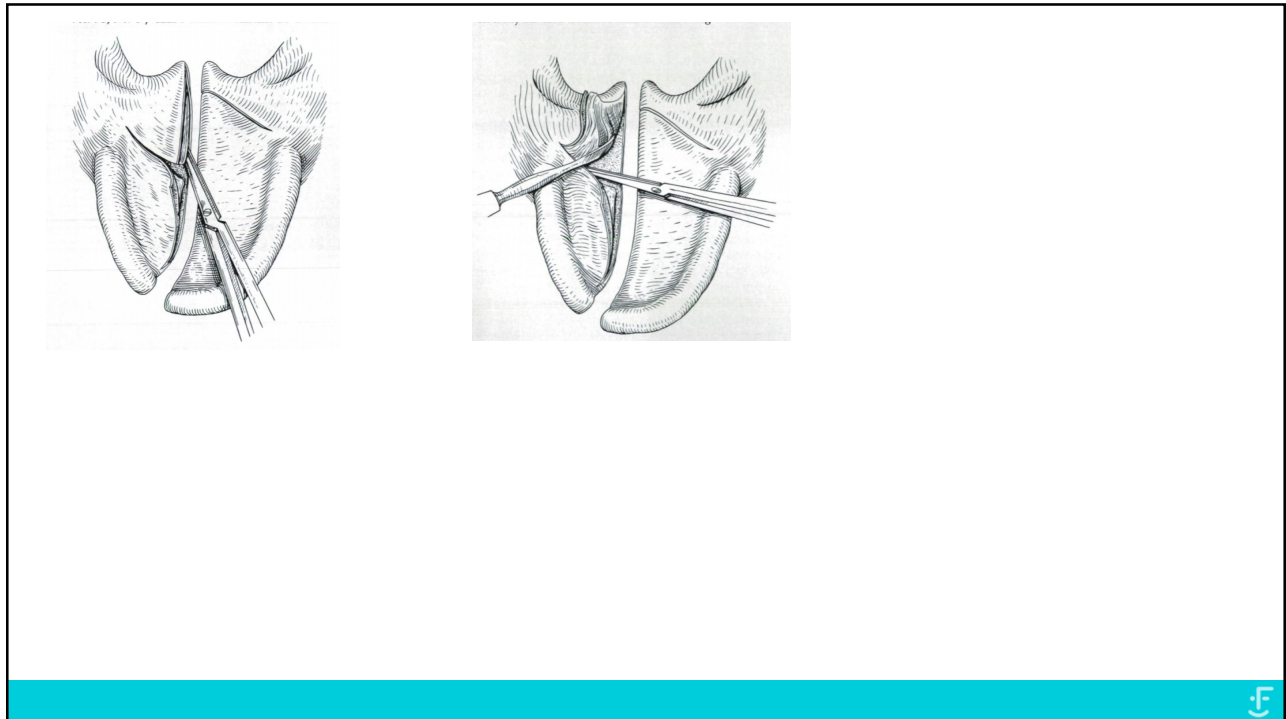
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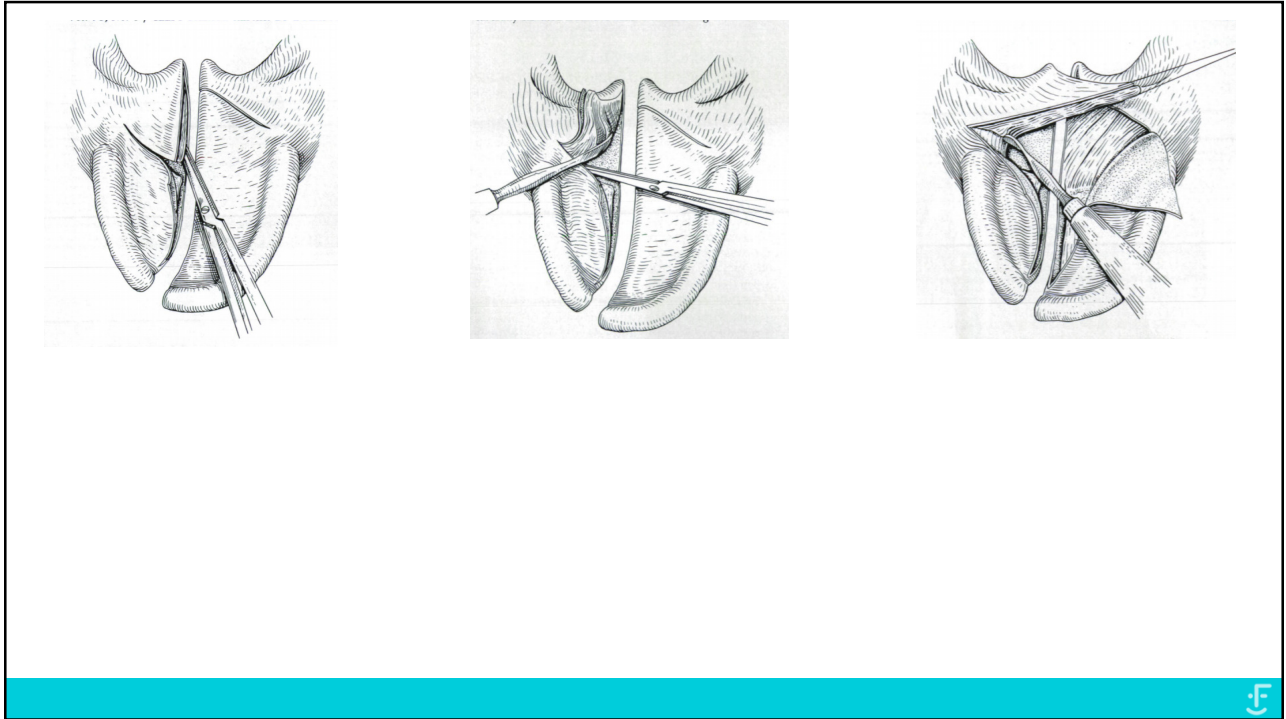
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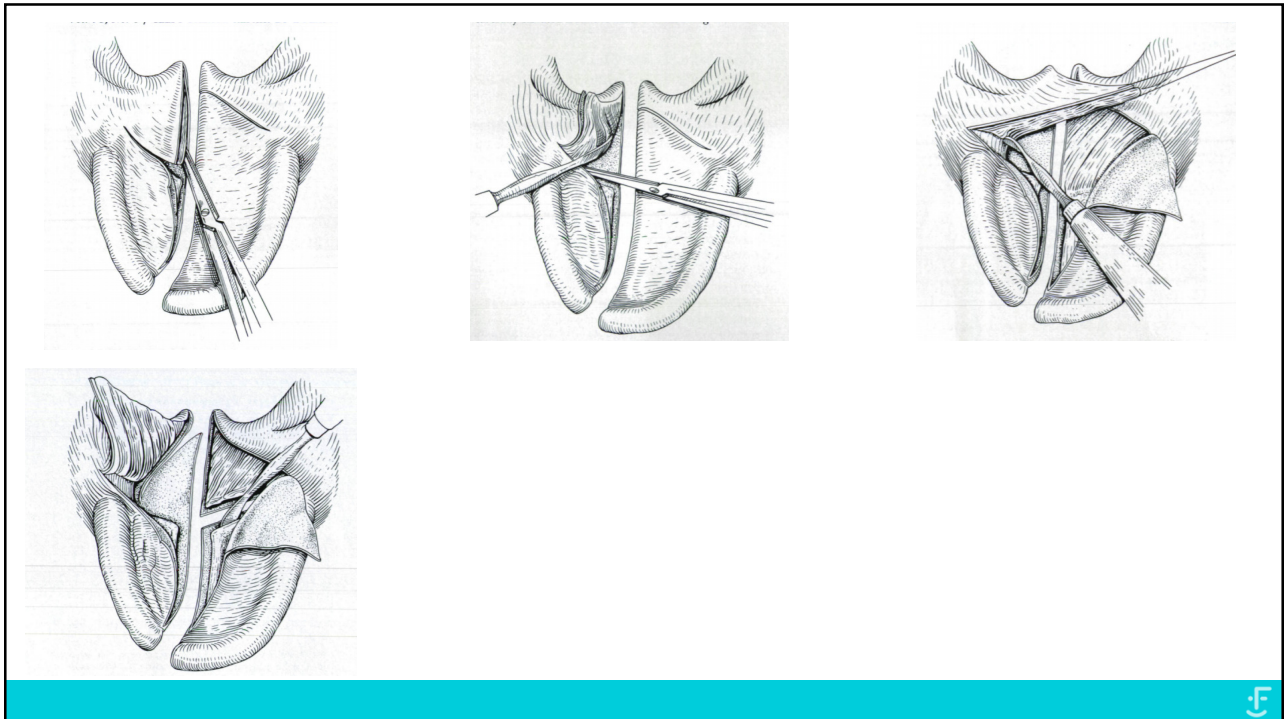
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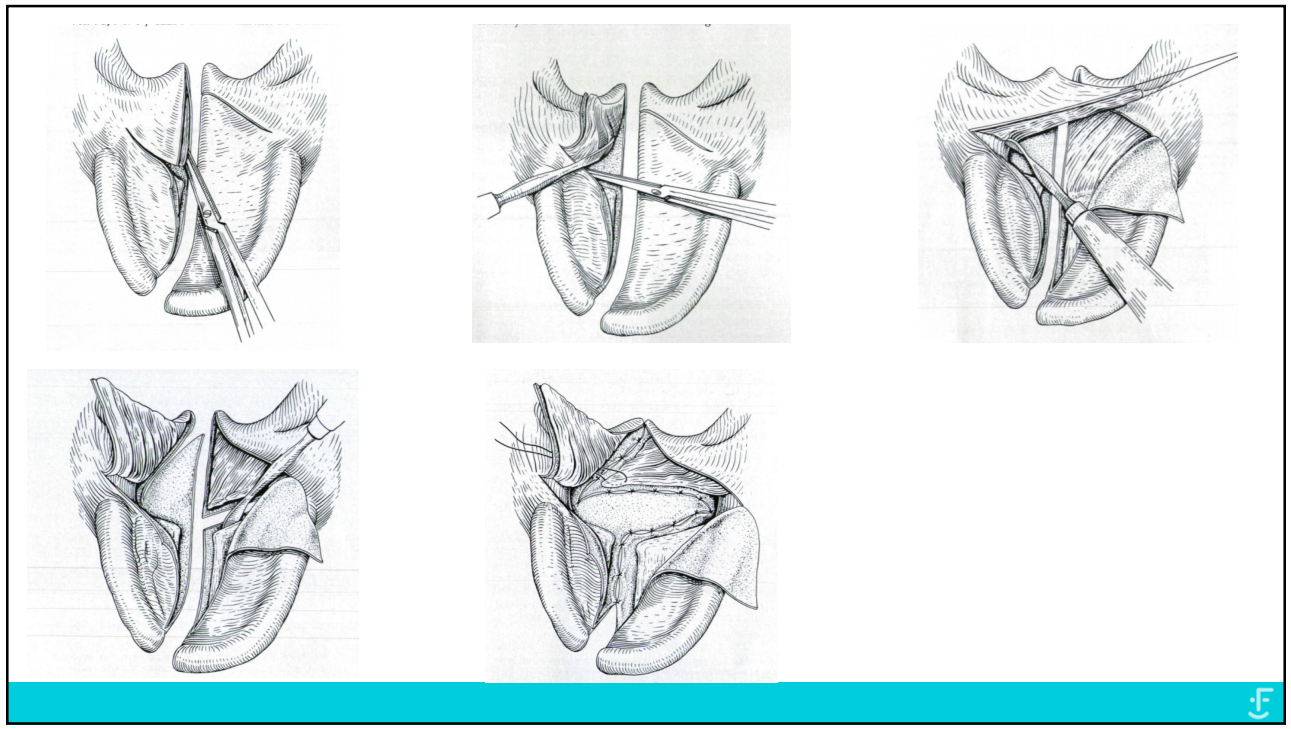
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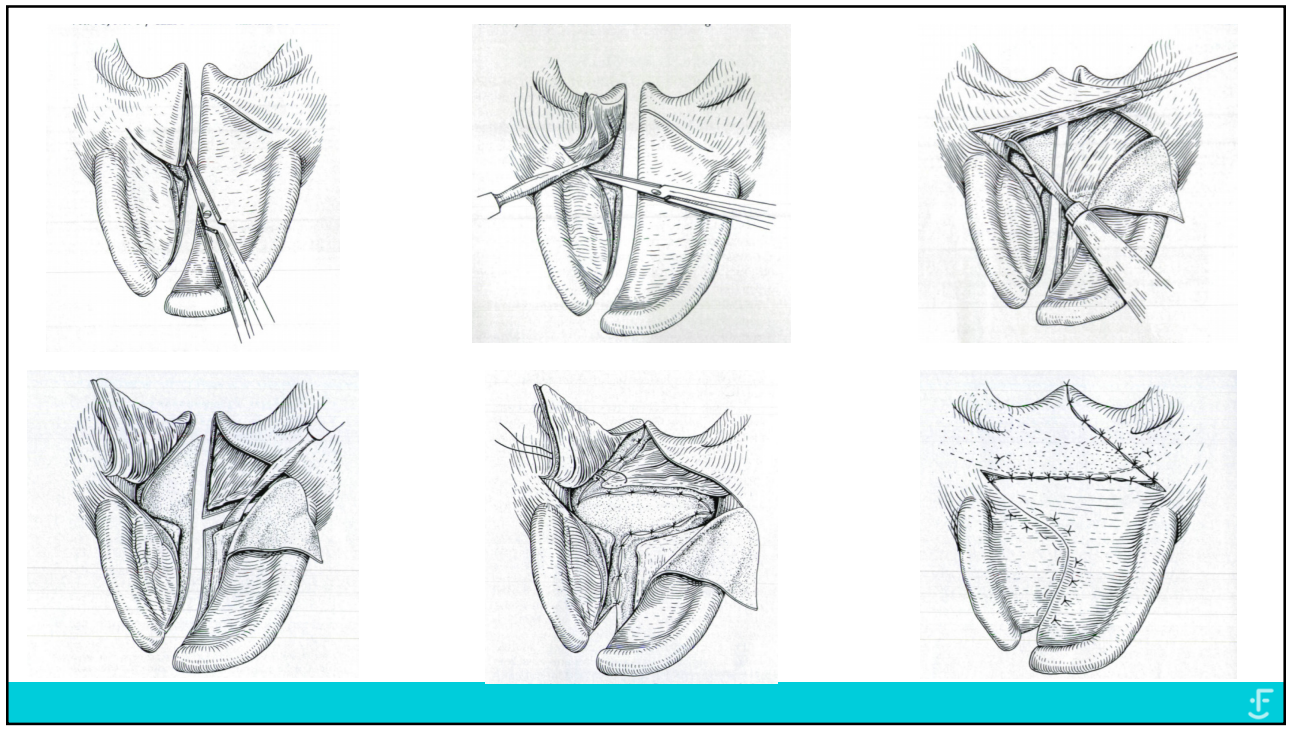
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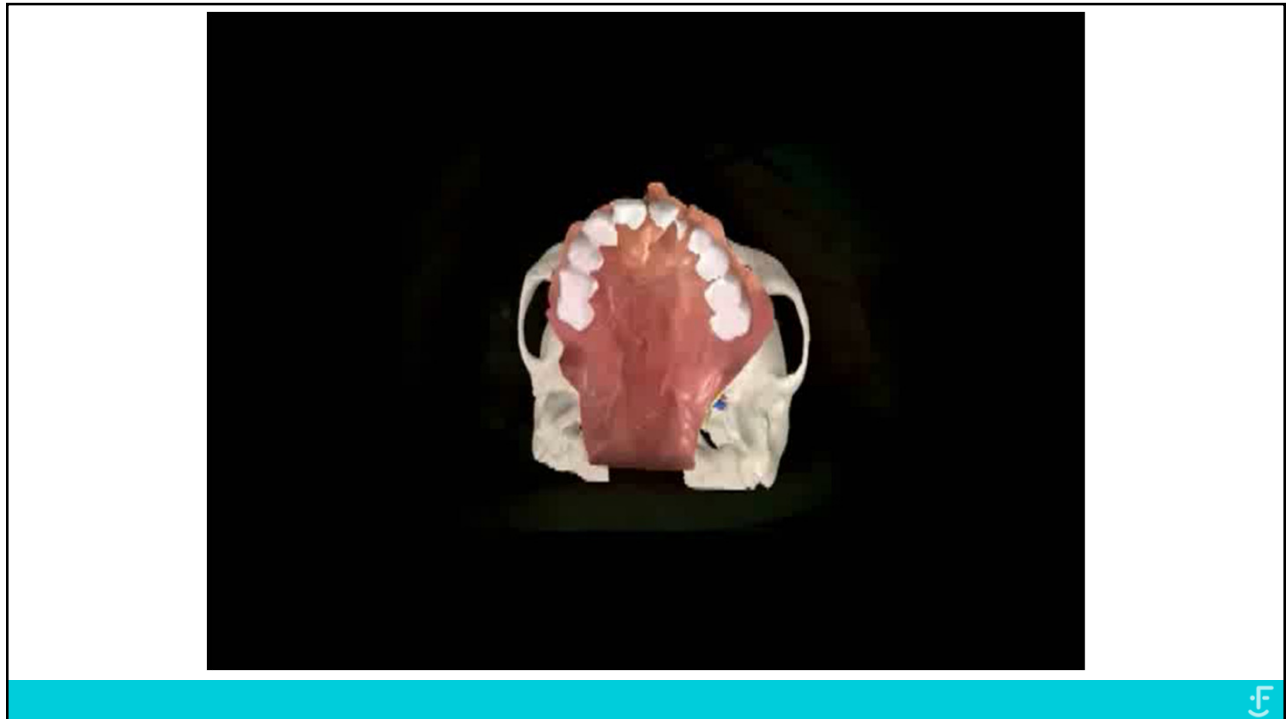
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What About VPI?

- High quality cleft palate repair
- Wider the cleft --> higher VPI risk
- 5–7% VPI rate
- Skilled Speech Pathologist is critical
 - Diagnose VPI
 - Provide speech therapy
 - Provide nasoendoscopy



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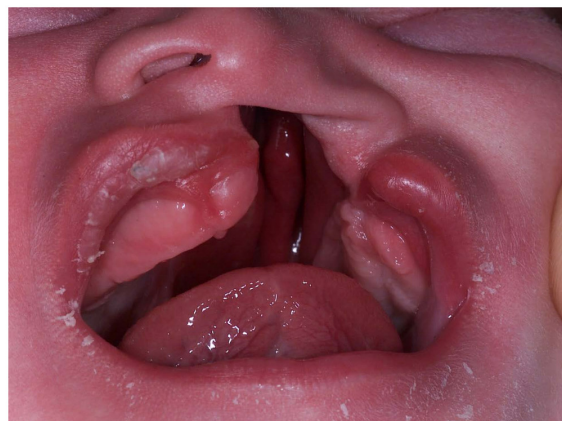
Opinion: Nose Revision

- Yes!!
- Very important at school age
- Lip revision also done
- BUT...I strive to do the best with the least surgery
 - Revision rate on my patients – 7%

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PROCEEDURES

SmileTrain

Help English (US) START TEST SIGN OUT

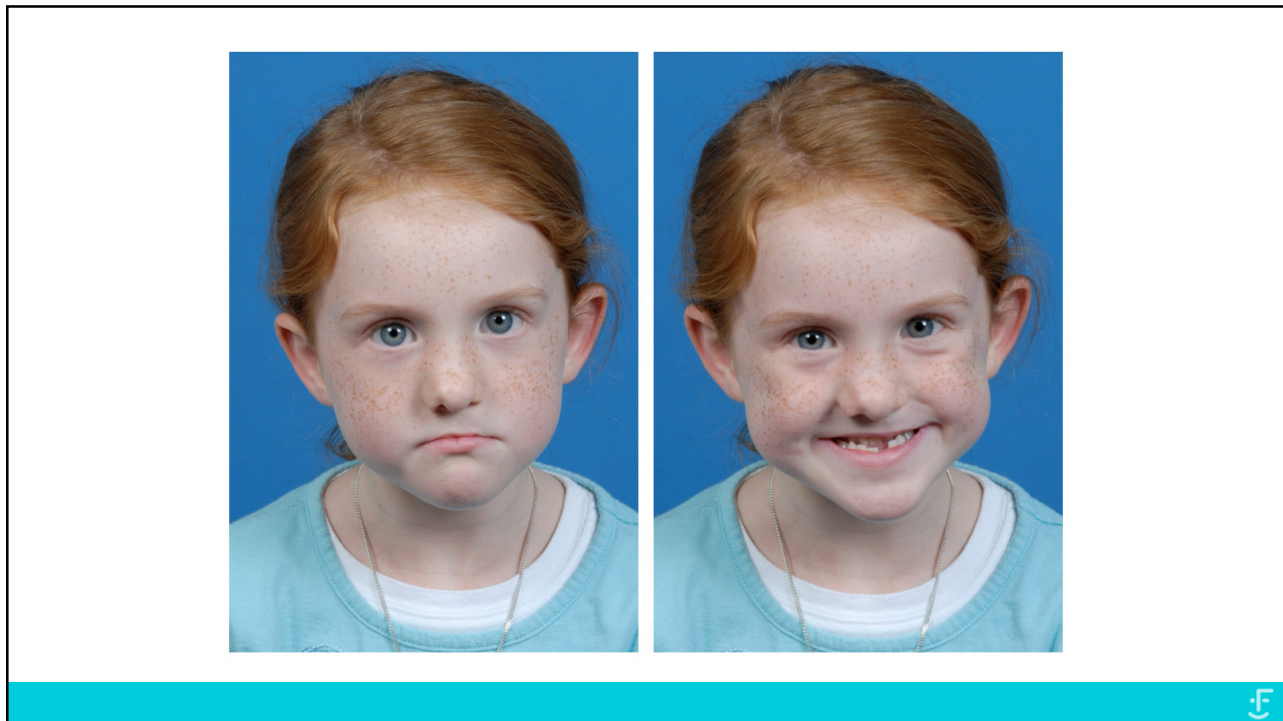
Mohler Procedure (nose unilateral)

M flap and C flap

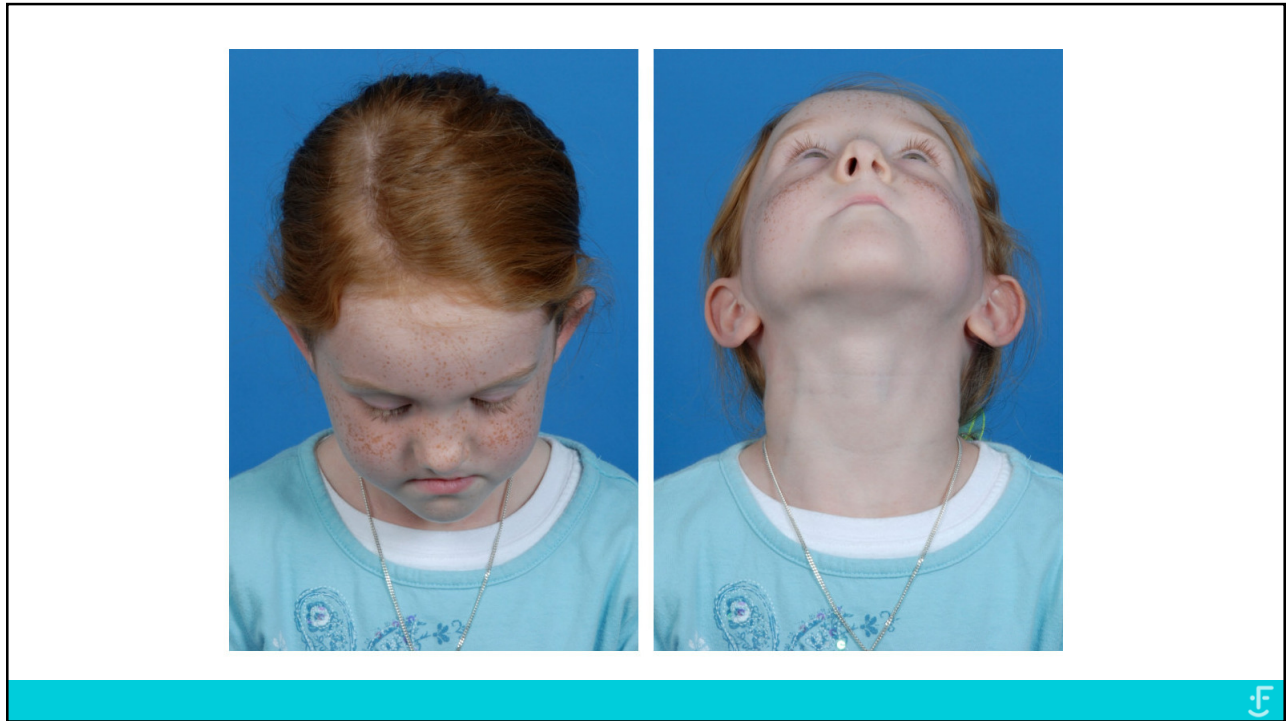
The M flap is dissected free from the orbicularis oris with care not to injure the delicate maxillary flap. The C-flap is then elevated off of the orbicularis oris with care to stay within the subcutaneous plane. This dissection is continued into the apex of the extended Mohler incision within the columella.

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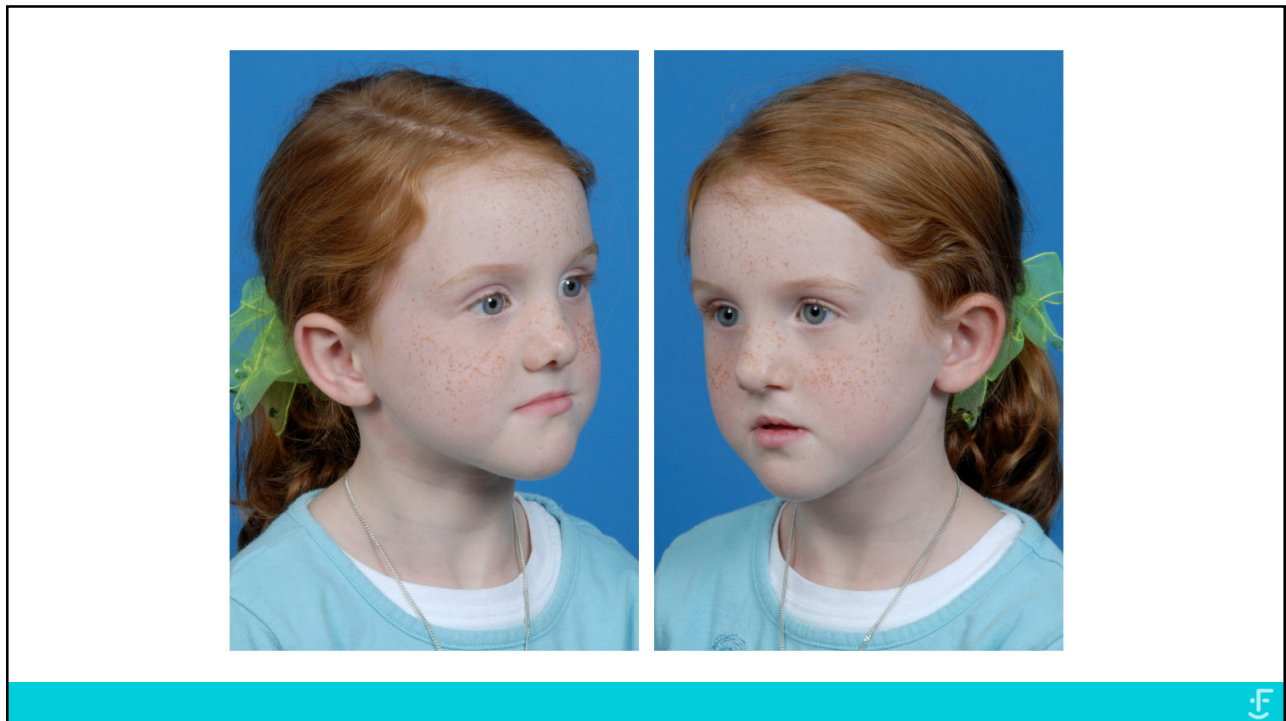
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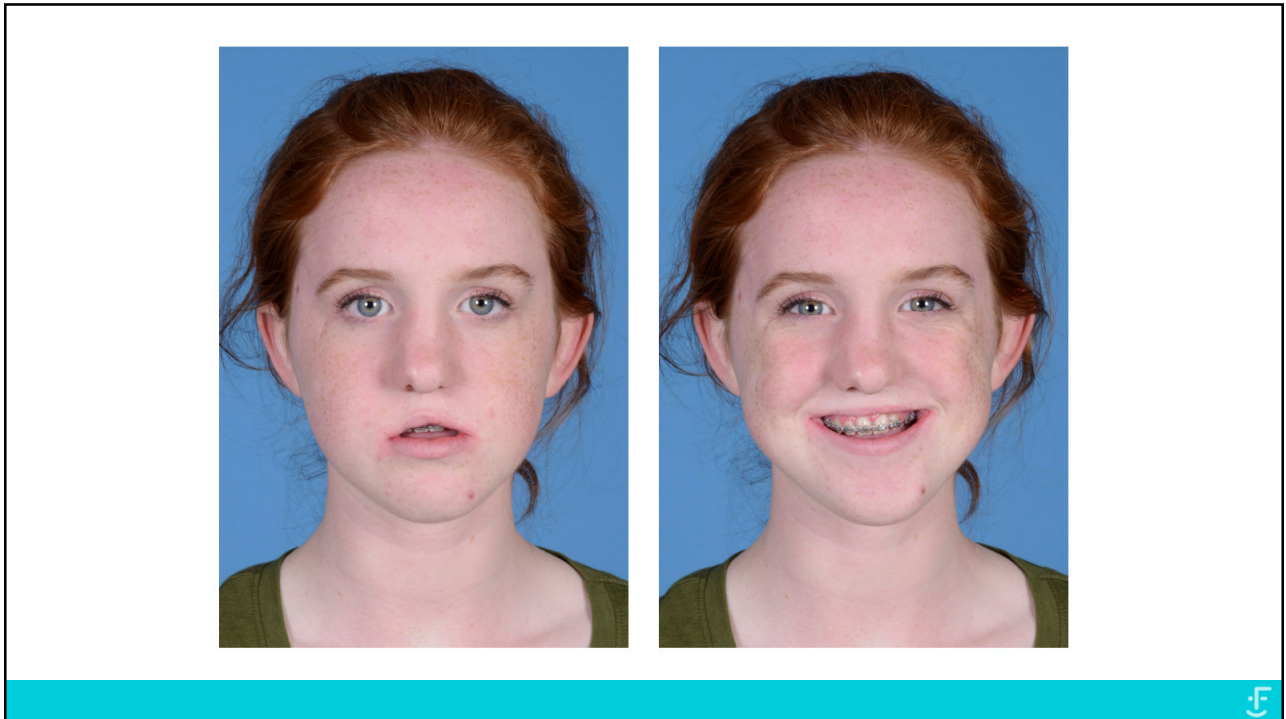
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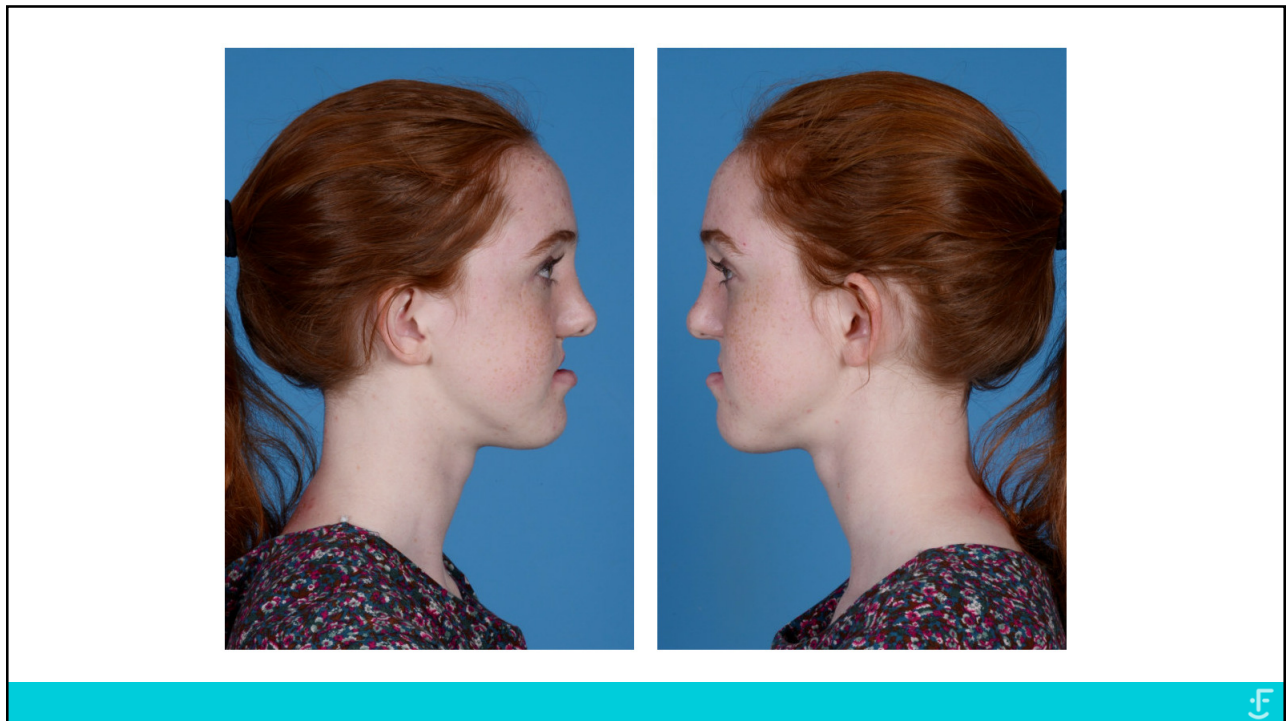
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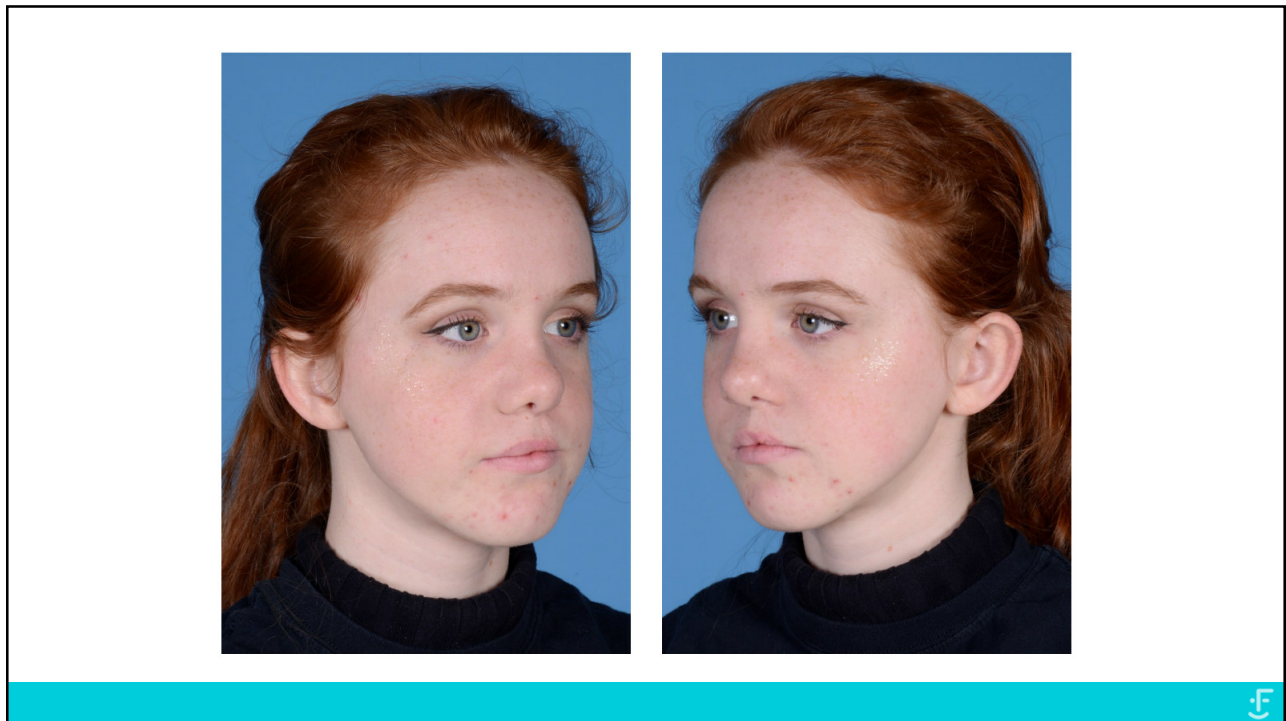
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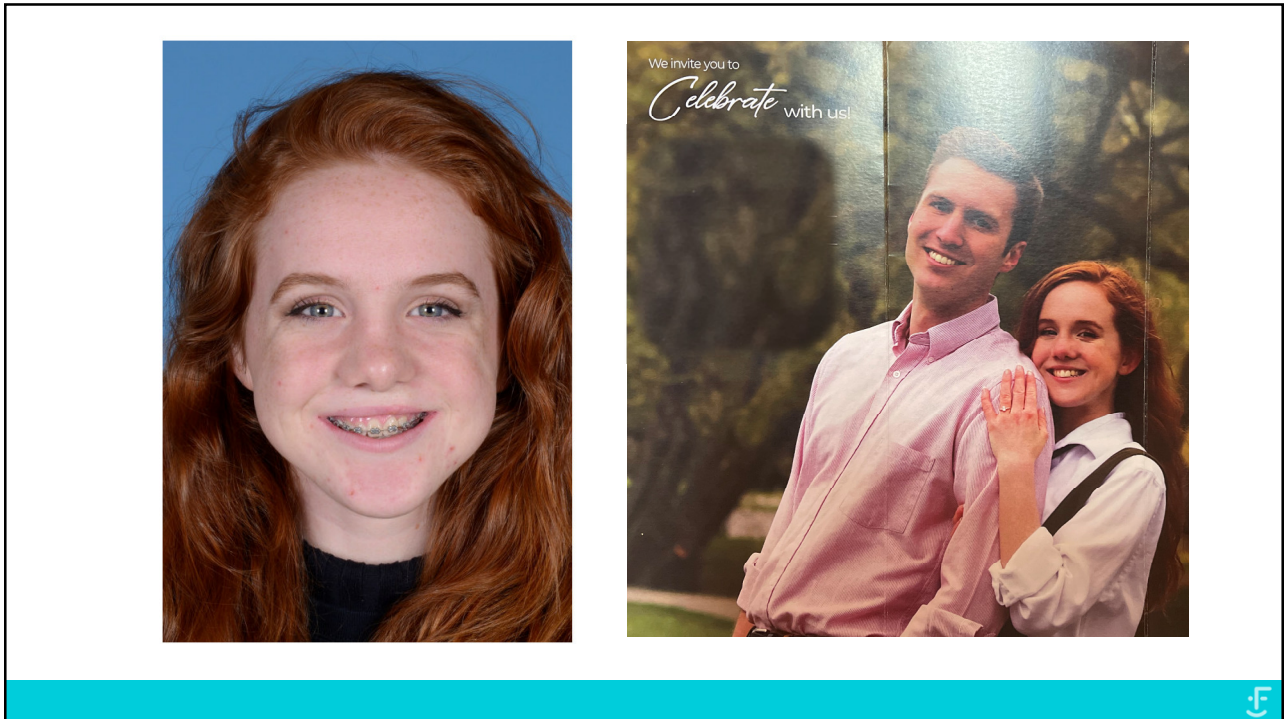
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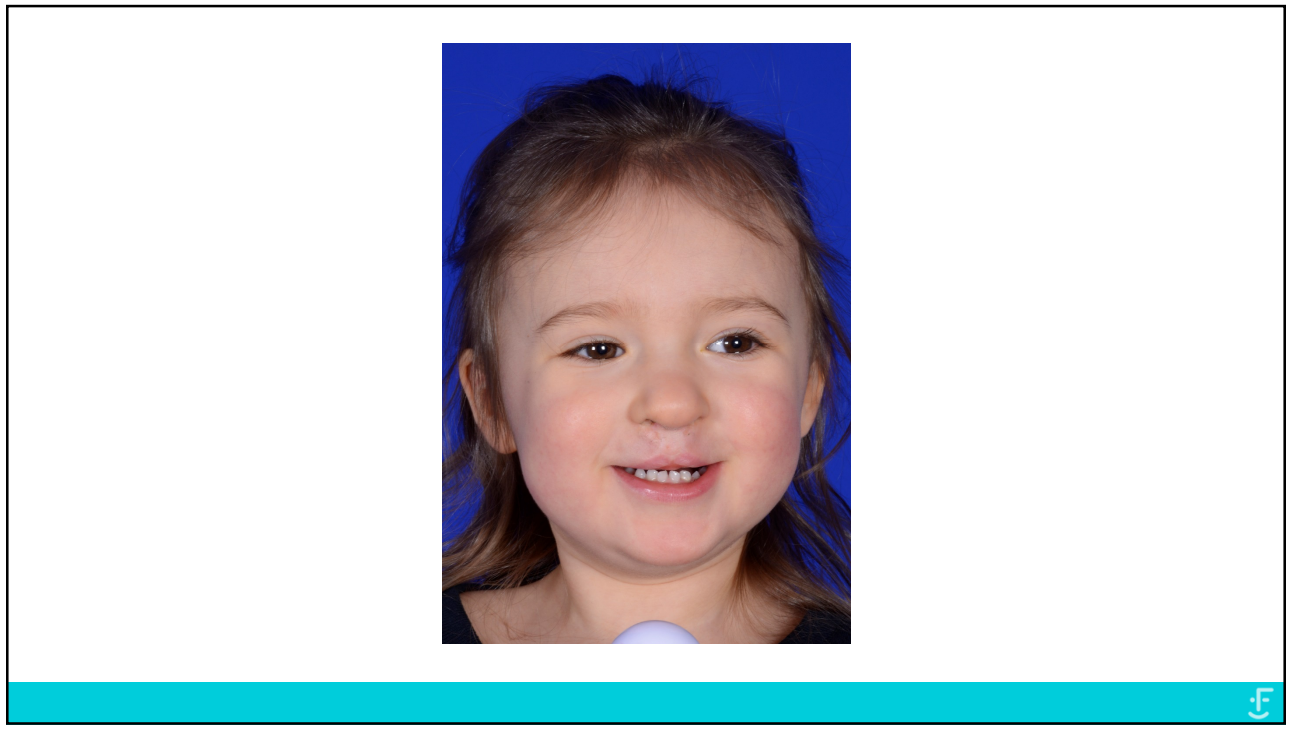
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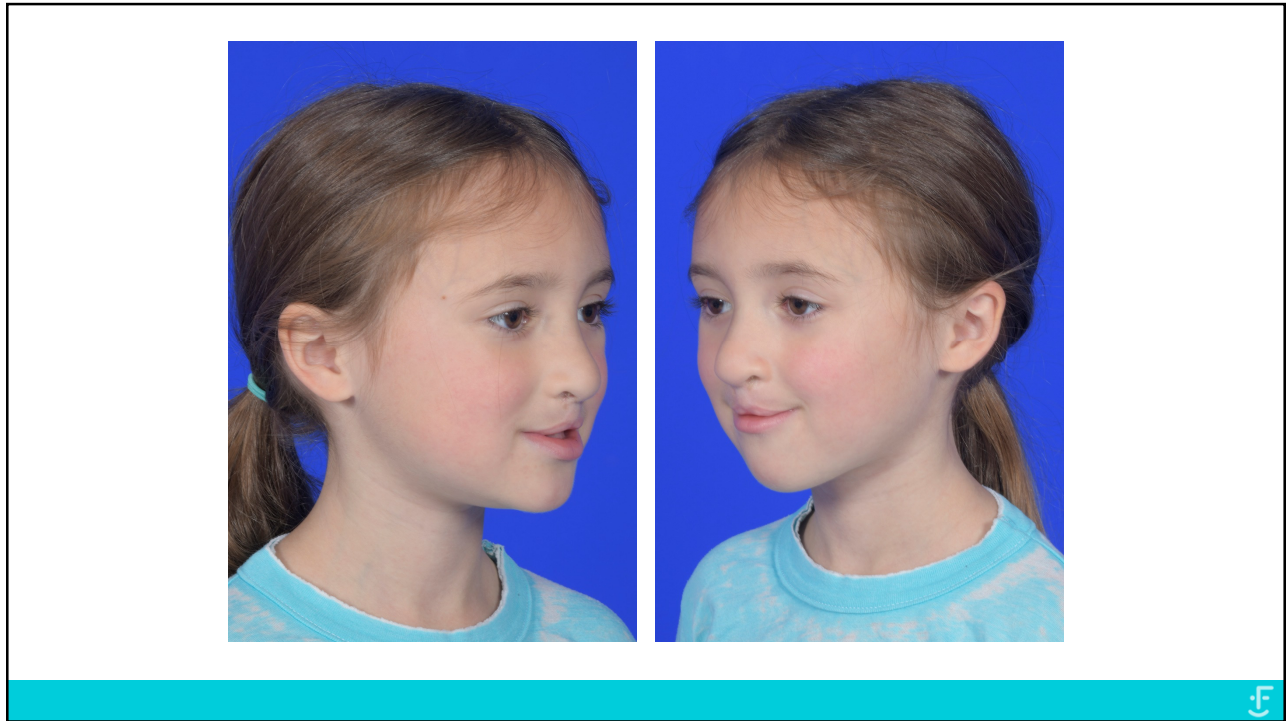
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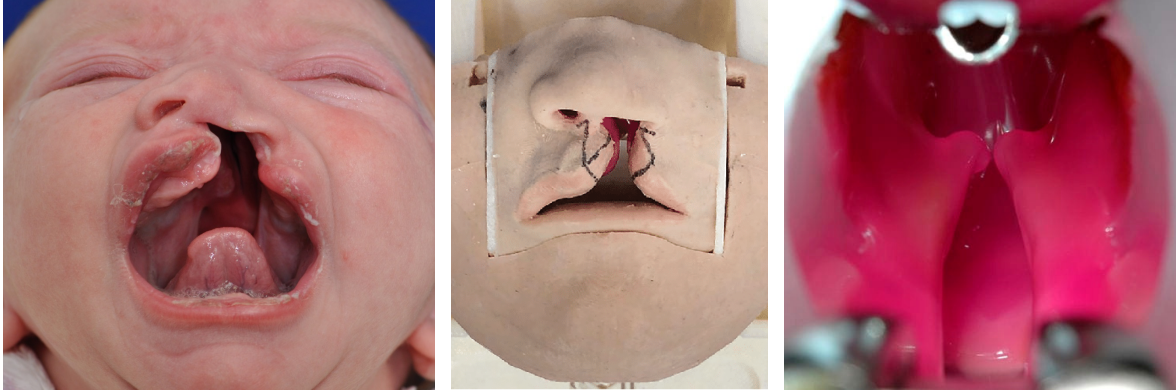
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Surgeon Selection

- Very important decision
- Look at the TEAM
- Look at photos
- Talk to other families treated by the surgeon/team
- Look at social media
- Instagram: **@robertofloresplasticsurgery**
- What is the surgeon showing?
- What are they not showing



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Speech & Feeding Considerations

Meg Lico, MS, CCC-SLP, CLC



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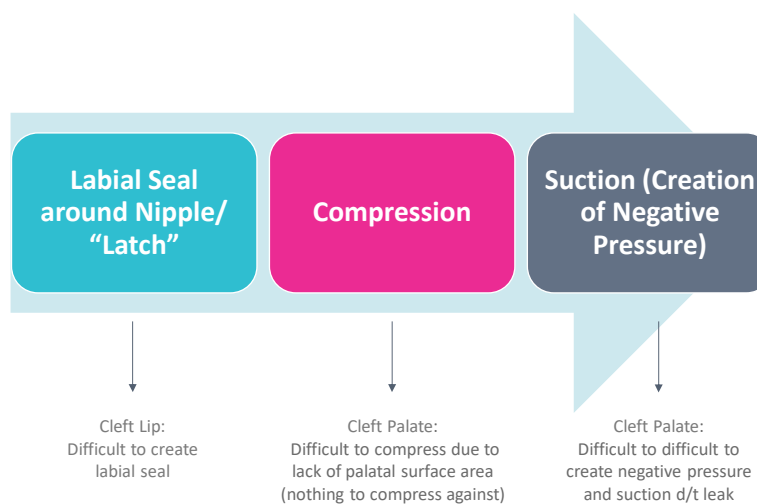
Feeding Considerations: Infancy & Toddlerhood

- The prevalence of feeding difficulties for children with a cleft palate was estimated to be 72% (Paes et al., 2017)
- Children with cleft lip and palate may need additional supports in order to thrive
- **Weight gain** and **safe feeding** is crucial as infants prepare for their surgeries
- Many babies with cleft can feed successfully with the appropriate accommodations



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Feeding Considerations: Infancy & Toddlerhood



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Feeding Considerations: Infancy & Toddlerhood

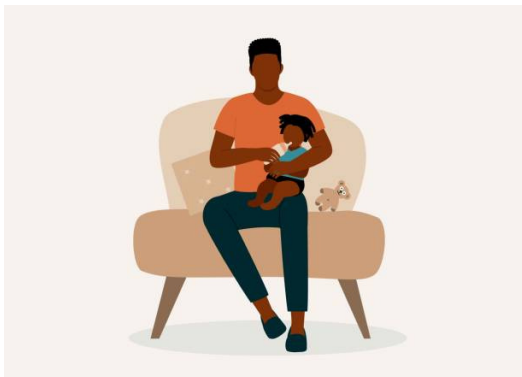
Bottle Selection

- **Dr. Brown's Specialty Feeding System**
- Pigeon, Medela/Haberman, Mead Johnson
- Considerations for **Nipple Flow Rate**
- **Baby in control of feed** vs. caregiver controlled
- Adjusting nipple placement in the mouth if unilateral cleft lip vs. bilateral cleft lip



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Feeding Considerations: Infancy & Toddlerhood



- **Positioning** (upright positioning closer to 45–90° angle)
 - Recent research to also support inclined side-lying position as clinically indicated
- **Burping** frequently
- **Timing**
- Formula **supplementation**
- **Referrals** to feeding support as indicated for ongoing care (SLP, OT, RD, NP, GI, ENT)

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Feeding Considerations: Preparing for Post-Operative Surgery Diets

- **In infancy:** May impact how you start solids with your child (what foods to offer, etc.)
- Post-operative protocols vary by cleft team (Sitzman et al., 2024)
- Child may be placed on liquid, puree only diets to facilitate surgical healing
- May need to utilize special bottles/cups
- Utilization of an interdisciplinary team is crucial to success in the post-operative period (RD, NP, RN, SLP) for children of all ages!



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Speech & Language Considerations

- Between 50–70% of children with cleft palate will need speech therapy by preschool age (Beckett et al., 2018; Hardin-Jones & Jones, 2005)
- The earlier concerns are addressed, the easier they are to correct
 - Speech therapy has been shown to increase the number of sounds, accuracy of sounds, and reduced use of glottal stops/throat sounds for the children with clefts (Lalsa, 2017; Scherer et al., 2008)



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Speech & Language Considerations: First Year

- **Babbling** may be impacted (timing, type of sounds babbled)
- **Language expansion should continue as normal**
- **Hearing follow-up is crucial**



myFace
Transforming Lives
Webinar Series:
Early Speech And
Language Development
in Children With Cleft
Lip/Palate



myFace
Changing Faces. Transforming Lives

STRATEGIES FOR SPEECH & LANGUAGE FOR YOUR CHILD BEFORE CLEFT PALATE REPAIR
Meg Lico, M.S., CCC-SLP

By the time you receive this handout, your child has likely undergone his/her initial cleft lip repair. Congratulations! Now, as you await the cleft palate repair (usually scheduled for around one year of age and determined by your craniofacial team's plastic surgeon), we want to begin thinking about how to expand your child's language skills. Here are some strategies you can use to help your child continue to develop his/her speech and language during this time:

#1 Capitalize on Strengths

Encourage and reinforce babbling sounds that your baby can produce even with an open cleft.

According to the Centers for Disease Control and Prevention, typical babbling development usually begins between 6 and 9 months. Babbling includes a string of consonant and vowel productions that are merged together. This means the baby is experimenting with words or sounds in his/her mouth but they are not yet able to string together these words to form a meaningful word or utterance.

Since your child has an open cleft that is awaiting repair, he/she will not be able to produce certain sounds in the mouth at this time. These sounds could include P, B, T, D, K, G, Z, and others. We do not want to model these sounds prior to palate repair as it could lead the child to develop incorrect speech patterns that will be difficult to correct later on, or cause communicative frustration as they cannot produce the sound correctly.

So what can we do to help a child continue to develop his/her language?

Tip: Focus on the sounds we know your child can produce, even with an open cleft palate!
These sounds usually include:

Y W N H M NG L

Your child can also make a number of different vowel sounds to correspond with these consonants! Here are just a few examples of target babbling strings that you can model for your child during play until the palate is repaired:

Nanananana Yiyiyayeye
Mamamomomo Wawawawowow

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MEMORIAL CHILDREN'S HOSPITAL OF NEWCASTLE

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Speech & Language Considerations: Early Childhood

Now, your child's cleft lip and palate have been repaired...congratulations!

One of the most important priorities now is speech/language development

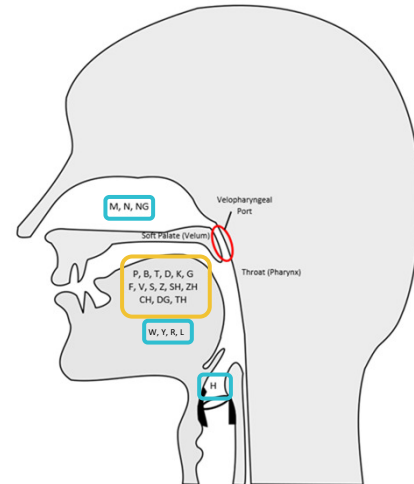


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Speech & Language Considerations: Early Childhood

- Children with cleft palate may need speech therapy to address various compensatory errors
- **Compensatory errors** can be mitigated in speech therapy, whereas **obligatory errors** cannot be
 - Obligatory errors may require additional orthodontic or surgical management
- **Resonance** becomes a large factor as the child continues to grow; your speech therapist will monitor to rule out *velopharyngeal dysfunction* often described as “nasal speech”



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NORMAL VELOPHARYNGEAL FUNCTION



The “door” is open for nasal breathing and articulation of nasal consonants.

The soft palate (velum) acts as a door between the oropharynx and nasopharynx.



The “door” closes for swallowing and articulation of oral consonants.

VELOPHARYNGEAL DYSFUNCTION



VP INSUFFICIENCY
The “door” is too small for the doorway. Air escapes through the nose. (Structural causes)



VP INCOMPETENCE
The “door” doesn’t get the right signals to open. (Neurogenic causes)



VP MISLEARNING
Oral phonemes go through the “door” when they shouldn’t. (Learned patterns)

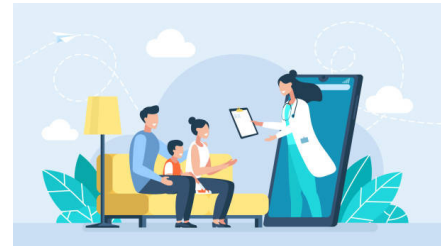
Credit: The Informed SLP
Created by Kazlin Mason, PhD, CCC-SLP. Art by Amanda Dreier, MS, CCC-SLP.

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Speech & Language Considerations: Adolescence & Beyond

- Speech considerations during **orthodontic management** in adolescence
- Speech and resonance changes can occur after later surgeries in young adulthood, such as with maxillary advancement surgeries
- Assessment and treatment should honor **patient autonomy** and involve **shared decision-making** with family



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Having a well-trained,
full-time speech and
feeding therapist is an
integral part of an
interdisciplinary cleft
team!



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Abby



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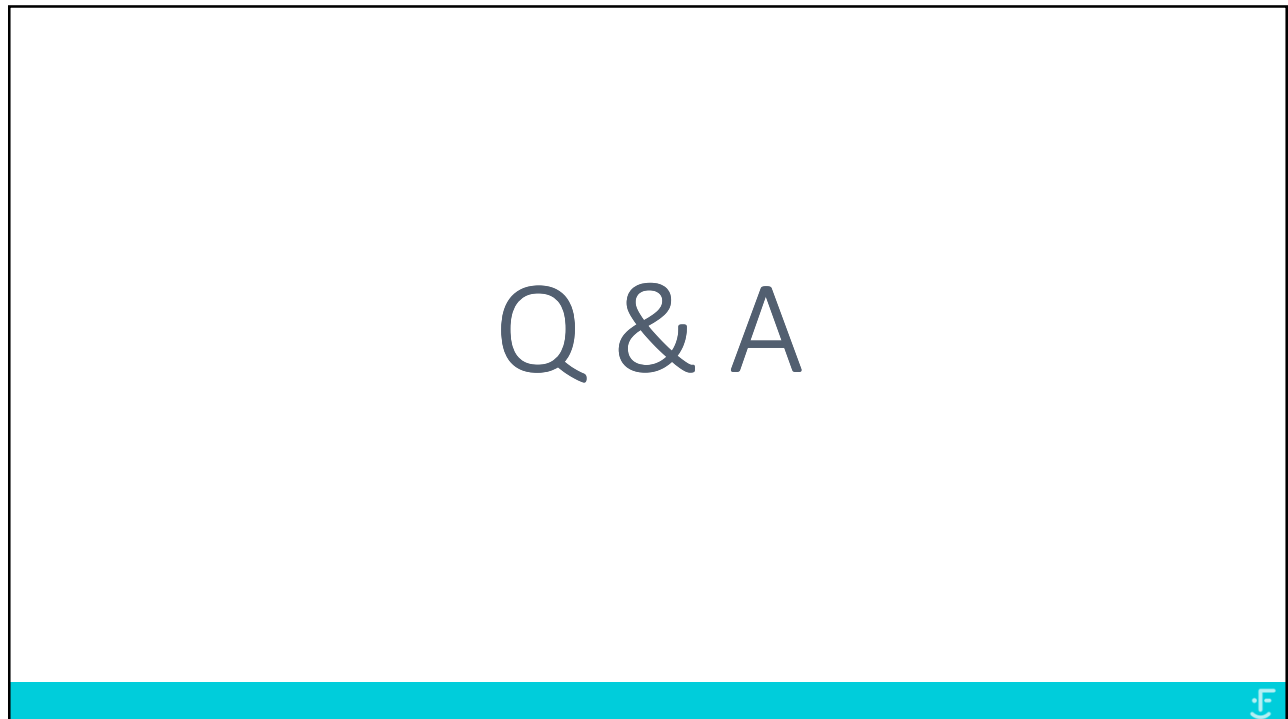


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Closing Remarks



Dina Zuckerberg
Director of Family Programs
myFace



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Webinar Evaluation

Please complete a brief webinar evaluation to provide us with feedback for future programs by clicking on the **“Evaluation”** tab at the top of the page or by scanning the QR code below using your mobile device.



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Additional Resources and Upcoming Events

- For additional information about **upcoming events** and **additional resources** visit: myFace.org or email us at info@myFace.org
- myFace offers several **FREE Virtual Support Groups** for individuals with facial differences, and for their parents
 - For more information, or to join a group, visit: www.myFace.org/online-groups
- **myFace, myStory** is our monthly broadcast and podcast series with interviews and roundtable discussions from the craniofacial community
 - Register at: www.myFace.org/myStory/



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Thank You for Joining Us!
We hope you enjoyed the program.

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