STUDENT CASE FILE | ANATOMICAL DOMAIN | LESSONS 1 TO 20

The Baby Mateo Case

One observed structural difference. Twenty evidence updates. One bounded clinical synthesis.

Composite patient snapshot

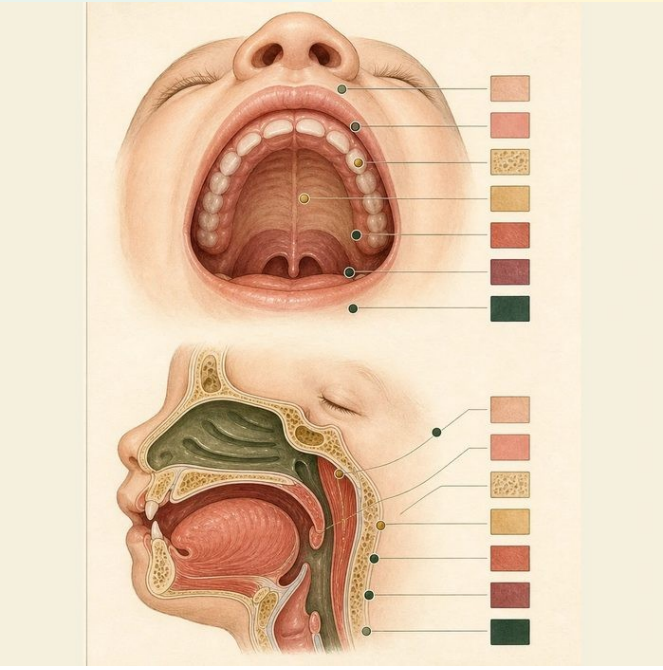
Patient	Mateo, a composite teaching case. No real patient data.
Birth	Term newborn. Breathing and tone are stable.
Observed structure	Complete unilateral left cleft lip and palate.
Initial whole-body exam	No additional congenital anomalies identified on the first structured examination.
Inquiry target	Is the cleft isolated or part of a syndrome? What evidence supports the cause model and care plan?
Evidence rule	Use only the labeled findings supplied in the lesson. Do not invent history, tests, symptoms, or family details.

EVIDENCE SUPPLIED

Every required finding has a stable ID.

EVIDENCE NOT SUPPLIED

Do not invent missing symptoms, tests, exposures, or family history.

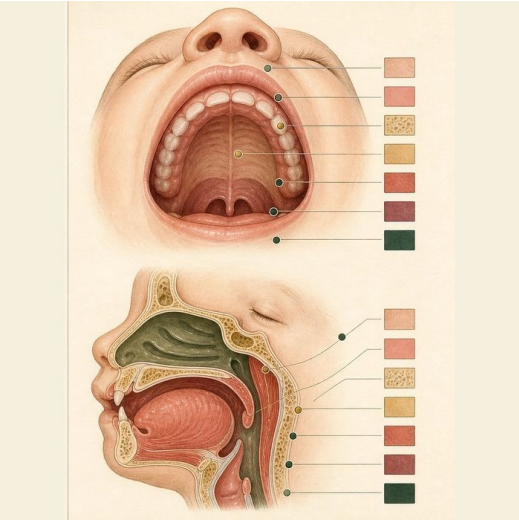


Illustration, not a clinical photograph. Composite craniofacial teaching model.

EVIDENCE UPDATE 1 OF 20 | PEDIATRIC ANATOMIST

The Normal Lip and Palate, Part by Part

Anatomy becomes useful when each structure is tied to the job it performs.



Biomedical teaching illustration: Map the normal lip, primary palate, and secondary palate

ID	Finding supplied in the case	Why it matters
ANA01-E1	The incisive foramen separates the primary palate in front from the secondary palate behind.	It is a landmark for describing the extent of a cleft.
ANA01-E2	The hard palate is bony and the soft palate is muscular.	One provides a fixed roof while the other moves for speech and swallowing.
ANA01-E3	Mateo's composite file describes an opening from the lip through the palate.	The normal oral-nasal barrier is interrupted across more than one region.

Decision in this update: Choose the anatomy correction and cite the landmark plus one function.

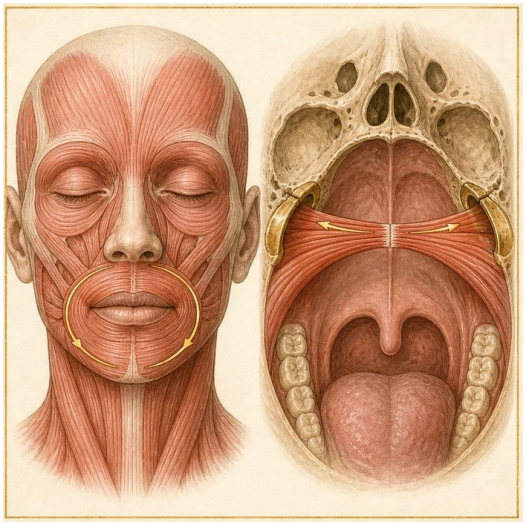
Claim ceiling: You may map normal structures and the barrier function. You may not classify Mateo's cleft until its full extent is supplied.

Handoff to the next update: We have a clean map of the normal lip and palate. But a lip and a palate are not just static shapes; they have to move, close, and seal. Which muscles make a lip and a palate work? We chase that next time.

EVIDENCE UPDATE 2 OF 20 | SURGICAL ANATOMIST

The Muscles That Make a Lip and Palate Work

Muscle function depends on fiber direction, attachment, and continuity, not merely on muscle presence.



Biomedical teaching illustration: Trace the normal lip sphincter and palatal sling

ID	Finding supplied in the case	Why it matters
ANA02-E1	Orbicularis oris fibers normally form a continuous ring around the mouth.	The ring supports lip seal and coordinated movement.
ANA02-E2	Levator veli palatini fibers normally form a transverse sling across the soft palate.	The sling elevates the velum toward the pharyngeal wall.
ANA02-E3	Fiber direction predicts the line of pull.	A muscle can be present but function poorly when redirected or interrupted.

Decision in this update: Choose the revision and use both muscle examples.

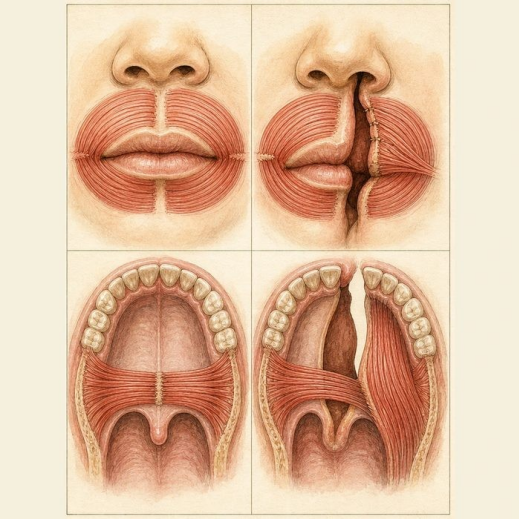
Claim ceiling: You may predict normal lines of pull. You may not infer Mateo's exact muscle displacement before viewing cleft anatomy.

Handoff to the next update: We know the normal muscle plan and the rule that direction and continuity decide function. But we have not yet looked closely at Mateo. So what exactly is interrupted in his lip and palate, and what happens to these muscles? We chase that next time.

EVIDENCE UPDATE 3 OF 20 | CRANIOFACIAL SURGEON (ANATOMY OF THE DEFECT)

The Anatomy of the Cleft, What Is Actually Interrupted

A cleft is not only a visible gap; it also redirects muscles and changes the forces they produce.



Biomedical teaching illustration: Compare normal and cleft muscle paths

ID	Finding supplied in the case	Why it matters
ANA03-E1	Mateo's left lip, alveolus, and palate are discontinuous in the composite examination.	The cleft crosses skin, muscle, bone, and mucosa.
ANA03-E2	Orbicularis fibers insert along the cleft margins rather than completing a ring.	The lip pulls asymmetrically.
ANA03-E3	Levator fibers run more front-to-back and attach abnormally near the posterior hard palate.	The soft-palate sling is not normally oriented.

Decision in this update: Choose the plan and cite one lip finding plus one palate finding.

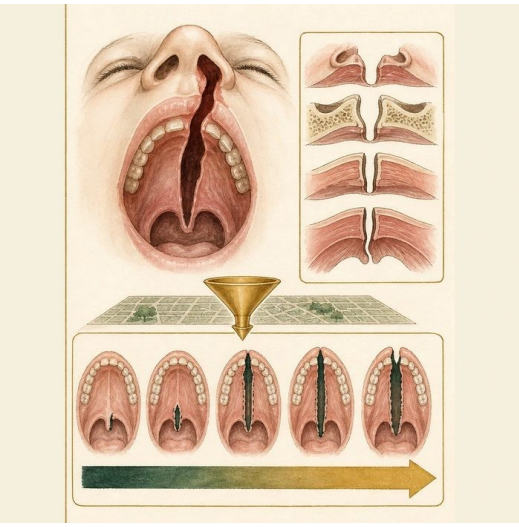
Claim ceiling: You may describe the supplied structural displacement. You may not choose a specific surgical technique yet.

Handoff to the next update: We know exactly what is interrupted in Mateo and that the muscles are displaced. But we keep describing his cleft in long sentences. How do surgeons describe a cleft precisely and briefly enough that any team in the world knows exactly what they mean? We chase that next time.

EVIDENCE UPDATE 4 OF 20 | CRANIOFACIAL SURGEON (CLEFT CLASSIFICATION)

Saying It Precisely, How Surgeons Classify a Cleft

A useful cleft label records side, completeness, and anatomical extent without replacing the examination.



Biomedical teaching illustration: Classify Mateo from the supplied examination

ID	Finding supplied in the case	Why it matters
ANA04-E1	The opening is on Mateo's left side.	The cleft is unilateral left.
ANA04-E2	The cleft extends through the lip and alveolus into both hard and soft palate.	The cleft is complete and involves lip, alveolus, and palate.
ANA04-E3	Veau III describes a unilateral complete cleft involving the soft and hard palate and continuing through the alveolus on one side.	The palate component fits Veau III.

Decision in this update: Choose the most precise supported label and cite all three evidence cards.

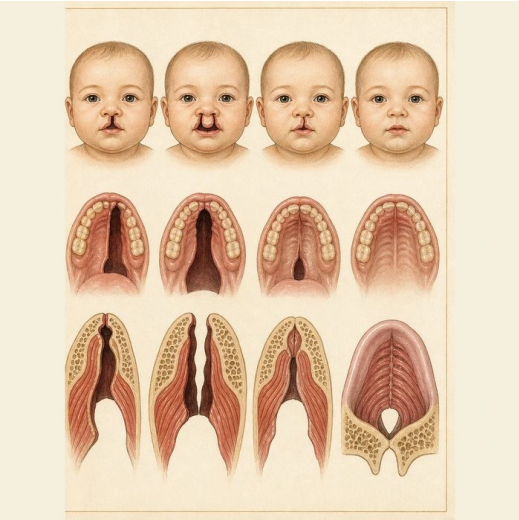
Claim ceiling: You may classify the supplied anatomy. You may not use the label to claim a genetic cause or predict outcome.

Handoff to the next update: We can now name Mateo's cleft precisely: Veau III, a complete unilateral left CL/P. But his is only one shape out of many. Some clefts are on both sides, some stop short of the nostril, and some hide under intact skin. What makes one cleft different from another, and what is the full spectrum of forms? We chase that next time.

EVIDENCE UPDATE 5 OF 20 | CRANIOFACIAL SURGEON (THE SPECTRUM OF CLEFT PHENOTYPES)

One Cleft, Many Shapes, The Cleft Spectrum

Clefts vary along several independent axes, so one familiar example cannot stand for the whole spectrum.



Biomedical teaching illustration: Place four case cards on the cleft spectrum

ID	Finding supplied in the case	Why it matters
ANA05-E1	One case card shows a cleft on both sides of the lip and alveolus.	It is bilateral regardless of whether the palate is complete.
ANA05-E2	Another stops before reaching the nostril floor.	It is an incomplete lip cleft.
ANA05-E3	A third has intact oral mucosa but a notched hard palate and separated soft-palate muscles.	A submucous cleft can be hidden under intact mucosa.

Decision in this update: Choose the classification method and demonstrate it on two cards.

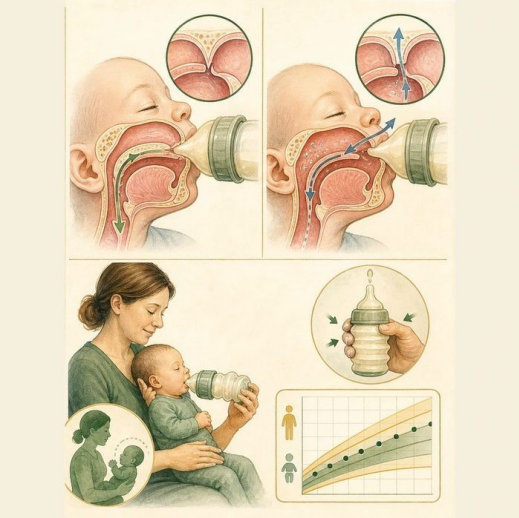
Claim ceiling: You may describe the supplied anatomy. You may not infer function from appearance alone.

Handoff to the next update: We have pinned Mateo to the spectrum: unilateral, complete, overt. But describing his cleft does not solve his most urgent problem. His open cleft connects his mouth and nose, and his parents are most afraid he cannot eat. Why can't Mateo feed normally, and what helps now? We chase that next time.

EVIDENCE UPDATE 6 OF 20 | FEEDING SPECIALIST

Why Feeding Fails, and What Helps Right Now

A cleft palate limits suction because the mouth cannot seal from the nose, so feeding support changes flow rather than blaming effort.



Biomedical teaching illustration: Trace pressure and flow during Mateo's feeding

ID	Finding supplied in the case	Why it matters
ANA06-E1	Mateo has a complete cleft palate connecting the oral and nasal spaces.	He cannot form a typical sealed suction chamber.
ANA06-E2	He coordinates swallowing and breathing but tires during long feeds.	The primary supplied problem is inefficient transfer, not absent effort.
ANA06-E3	The team can provide an assisted-flow bottle, upright positioning, pacing, and weight monitoring.	Support works around the pressure leak while protecting growth and breathing.

Decision in this update: Choose today's feeding plan and cite the mechanism plus monitoring evidence.

Claim ceiling: You may recommend the supplied educational support plan. You may not rule out swallowing or airway disease if new safety signs appear.

Handoff to the next update: We can keep Mateo fed today by working around the gap. But the gap is wide, and the wider it is, the harder the lip repair will be. Could we gently shape and narrow the cleft before any operation so feeding gets easier and the surgery starts from a better position? We chase that next time.

EVIDENCE UPDATE 7 OF 20 | ORTHODONTIST (PRESURGICAL INFANT ORTHOPEDICS)

Shaping the Gap Before Surgery

Presurgical molding changes the starting geometry before repair; it does not fuse tissue, and long-term benefits remain uncertain.

Biomedical teaching illustration: Evaluate nasoalveolar molding for Mateo

ID	Finding supplied in the case	Why it matters
ANA07-E1	The supplied model shows Mateo's alveolar gap narrowing during monitored appliance use.	The starting geometry can change before lip repair.
ANA07-E2	The appliance does not create tissue fusion or replace surgery.	Molding is positioning, not closure.
ANA07-E3	Systematic reviews report low or very low certainty for many long-term outcomes.	Short-term narrowing should not be sold as a guaranteed lifelong benefit.

Decision in this update: Choose the counseling statement and cite one measured benefit plus one uncertainty.

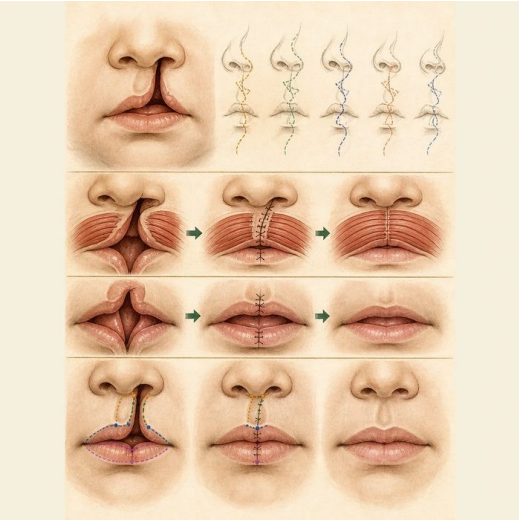
Claim ceiling: You may describe short-term positioning evidence. You may not guarantee long-term appearance, function, or fewer operations.

Handoff to the next update: We have shaped Mateo's cleft into a better starting position and kept him feeding. The gap is narrower, but it is still open. How does the surgeon actually rebuild the lip, and especially the ring of muscle inside it, into a working, symmetric whole? We chase that next time.

EVIDENCE UPDATE 8 OF 20 | CRANIOFACIAL SURGEON (CLEFT LIP REPAIR)

Rebuilding the Lip

Lip repair restores a continuous orbicularis ring and aligned lip landmarks, not merely a closed skin line.



Biomedical teaching illustration: Plan the layers of primary cleft lip repair

ID	Finding supplied in the case	Why it matters
ANA08-E1	Mateo's orbicularis fibers insert along the cleft margins.	The muscle must be identified and redirected across the gap.
ANA08-E2	The philtral column, cutaneous roll, vermilion, and mucosa are misaligned.	Visible subunits require precise matching.
ANA08-E3	ACPA lists orbicularis reconstruction and balanced nasolabial form as primary principles while recognizing multiple protocols.	The goals are shared even when incision geometry differs.

Decision in this update: Choose the plan and cite muscle plus landmark evidence.

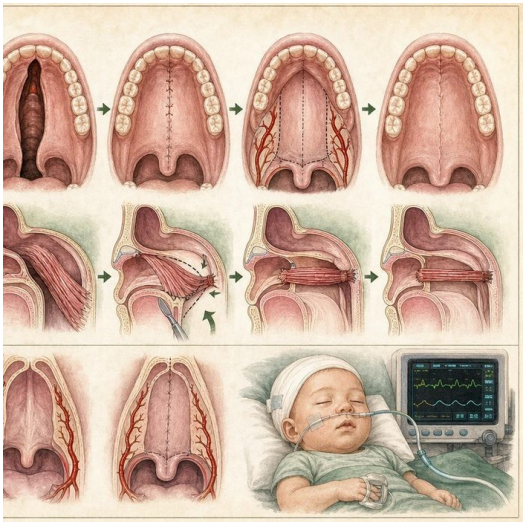
Claim ceiling: You may identify reconstruction goals. You may not prescribe one technique as universally best.

Handoff to the next update: We rebuilt the lip and its muscle ring, but the lip was the easier door to close. The roof of the mouth is deeper and hides a different muscle that must be rebuilt into a working sling. How does the surgeon rebuild the palate, where the repair happens in the dark and the muscle must be remade across the midline? We chase that next time.

EVIDENCE UPDATE 9 OF 20 | CRANIOFACIAL SURGEON (CLEFT PALATE REPAIR)

Rebuilding the Roof of the Mouth

Palate repair must close the oral-nasal opening and rebuild the levator sling while protecting blood supply and growth.



Biomedical teaching illustration: Compare closure-only with functional palatoplasty

ID	Finding supplied in the case	Why it matters
ANA09-E1	Mateo's cleft opens through hard and soft palate.	Both oral-nasal separation and soft-palate function need repair.
ANA09-E2	His levator fibers are abnormally oriented along the cleft margins.	Functional repair requires muscle reconstruction, not mucosal closure alone.
ANA09-E3	Palate surgery can risk bleeding, tissue injury, airway obstruction, fistula, and later growth effects.	A plan must include safety and surveillance, not only closure.

Decision in this update: Choose the plan and cite closure, muscle, and safety evidence.

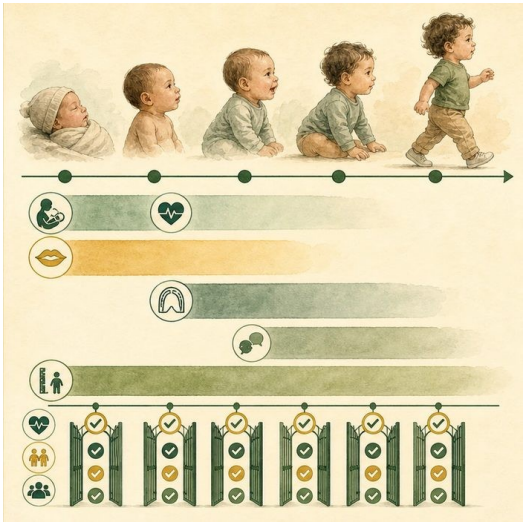
Claim ceiling: You may identify required goals and risks. You may not name one palatoplasty technique as best for every patient.

Handoff to the next update: We closed Mateo's palate and rebuilt the levator sling. But two children can have the very same closed palate, repaired the very same way, and one speaks clearly while the other does not. Part of that may be the calendar. When should the lip and palate each be repaired, and could timing itself help decide whether Mateo speaks clearly? We chase that next time.

EVIDENCE UPDATE 10 OF 20 | CRANIOFACIAL SURGEON (PLANNING THE REPAIR TIMELINE)

When to Repair, and Why the Calendar Matters

Cleft surgery timing balances present safety, early function, future growth, and family readiness rather than following one magic date.



Biomedical teaching illustration: Build Mateo's staged repair calendar

ID	Finding supplied in the case	Why it matters
ANA10-E1	ACPA states that primary lip repair is often initiated within the first six months for healthy infants.	Three months can be a common center target but is not a universal rule.
ANA10-E2	ACPA states that primary palate repair often occurs at 9 to 14 months and ideally by 18 months.	Speech development and readiness shape the window.
ANA10-E3	Mateo is medically stable in the composite file, but care is shared with the family and center team.	A final date depends on individual assessment and protocol.

Decision in this update: Choose the calendar language and cite both ACPA timing windows.

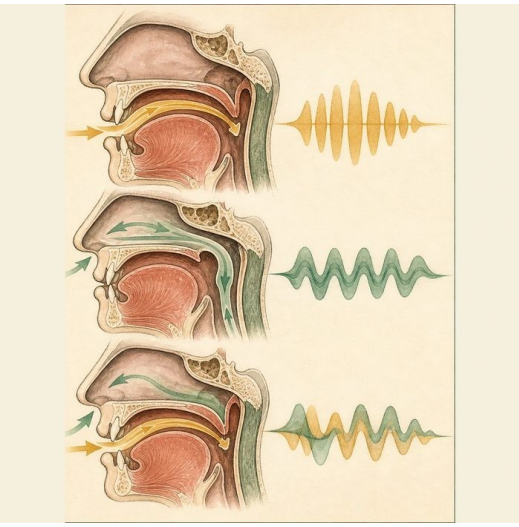
Claim ceiling: You may propose an educational sequence for the stable composite case. You may not schedule real surgery or override the treating team.

Handoff to the next update: We set Mateo's calendar: his lip repaired around three months, his palate before his first words land. We argued that the timing itself helps protect his speech. But that rests on a claim we have not proven. Why does closing the roof of the mouth matter so much for talking in the first place? We chase that next time.

EVIDENCE UPDATE 11 OF 20 | SPEECH-LANGUAGE PATHOLOGIST

How Palate Repair Lets a Child Speak

Clear oral speech needs a moving velopharyngeal valve that closes the nasal path for pressure sounds and opens it for nasal sounds.



Biomedical teaching illustration: Trace airflow during oral and nasal sounds

ID	Finding supplied in the case	Why it matters
ANA11-E1	Mateo's repaired soft palate contains a reconstructed levator sling.	The velum has the anatomy needed to elevate, but function must be measured.
ANA11-E2	A speech sample shows pressure consonants with no consistent nasal emission.	The supplied sample supports effective closure during those sounds.
ANA11-E3	Speech assessment includes resonance, nasal emission, articulation, and intelligibility.	One sound or one appearance cannot define the whole speech outcome.

Decision in this update: Choose the explanation and cite airflow plus speech-sample evidence.

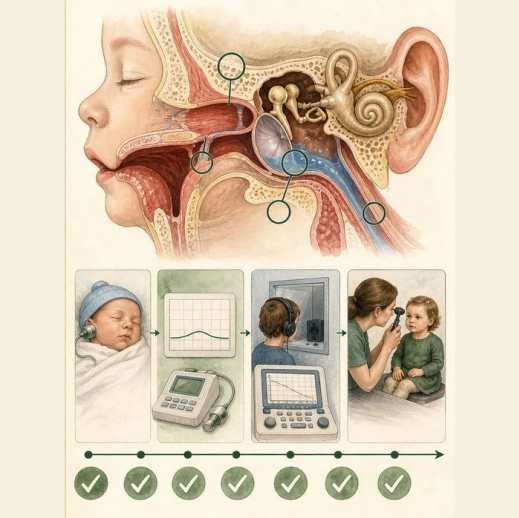
Claim ceiling: You may interpret the supplied educational speech sample. You may not diagnose a real child's resonance without a complete evaluation.

Handoff to the next update: We answered why palate repair decides clear speech. But here is a new clue: the muscles that move Mateo's soft palate are anchored near the skull base, right next to the tube that drains his middle ear. If those same muscles are abnormal, what happens to his ears? We chase that next time.

EVIDENCE UPDATE 12 OF 20 | ENT AND AUDIOLOGIST

Why Cleft Children Get So Many Ear Infections

Cleft-palate muscle anatomy can impair Eustachian tube opening, so hearing needs repeated surveillance even after a normal newborn screen.



Biomedical teaching illustration: Follow palate muscles to the middle ear

ID	Finding supplied in the case	Why it matters
ANA12-E1	Children with cleft palate have increased risk for Eustachian tube dysfunction and middle-ear disease.	The risk continues beyond the newborn period.
ANA12-E2	Mateo passed a newborn hearing screen.	That screen does not predict every later conductive hearing problem.
ANA12-E3	ACPA recommends regular ear examination and ongoing audiology surveillance, with tube decisions based on clinical evaluation.	Monitoring is routine; a procedure is individualized.

Decision in this update: Choose the next step and cite anatomy plus longitudinal evidence.

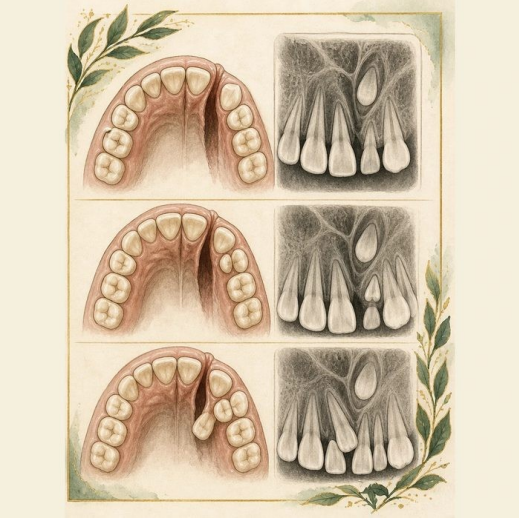
Claim ceiling: You may identify surveillance and referral needs. You may not prescribe tubes or antibiotics without the treating clinicians' evaluation.

Handoff to the next update: We followed the cleft into speech and now into the ears, and each time the same abnormal muscles explain the trouble. But Mateo's cleft also runs straight through the gum ridge, the very bone where his upper teeth are forming. What does the cleft do to his teeth? We chase that next time.

EVIDENCE UPDATE 13 OF 20 | ORTHODONTIST

The Cleft Runs Through the Teeth

An alveolar cleft interrupts bone where teeth develop, so tooth position, shape, number, and eruption must be followed over time.



Biomedical teaching illustration: Map teeth beside Mateo's alveolar cleft

ID	Finding supplied in the case	Why it matters
ANA13-E1	Mateo's cleft crosses the left alveolar ridge between anterior tooth regions.	Bone continuity is absent where teeth need support.
ANA13-E2	The supplied dental image shows an absent or malformed lateral incisor beside the cleft.	Teeth next to the cleft commonly show number, shape, or position differences.
ANA13-E3	The permanent canine is developing above the cleft region.	Its stage will help time future orthodontic and graft planning.

Decision in this update: Choose the counseling statement and cite the dental map plus its uncertainty.

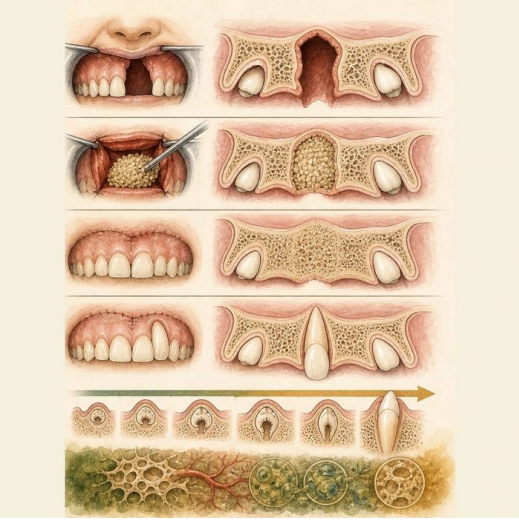
Claim ceiling: You may describe supplied tooth development. You may not predict an individual eruption outcome without serial clinical imaging.

Handoff to the next update: We found that the cleft leaves a gap in the bone of the gum ridge and disturbs the teeth there. But a tooth needs bone to erupt into, and Mateo's bone has a gap. How do we fill that bony gap so a tooth has a home and the gum arch is continuous again? We chase that next time.

EVIDENCE UPDATE 14 OF 20 | ORAL SURGEON (ALVEOLAR BONE GRAFT SEAT)

Filling the Bony Gap in the Gum Ridge

Alveolar graft timing follows dental development, usually before the adjacent permanent canine erupts, so living bone can support tooth movement.



Biomedical teaching illustration: Choose the graft window from dental evidence

ID	Finding supplied in the case	Why it matters
ANA14-E1	Mateo's alveolar cleft remains open after primary lip and palate repair.	The upper jaw segments need bony continuity if teeth will move through the site.
ANA14-E2	His adjacent canine has not erupted and its root is developing on the supplied image.	The dental stage supports pre-eruption planning.
ANA14-E3	ACPA states that graft timing should be based on dental development with orthodontist input, commonly before permanent teeth in the cleft region erupt.	A fixed age cutoff is less accurate than tooth stage.

Decision in this update: Choose the planning decision and cite dental stage plus preparation evidence.

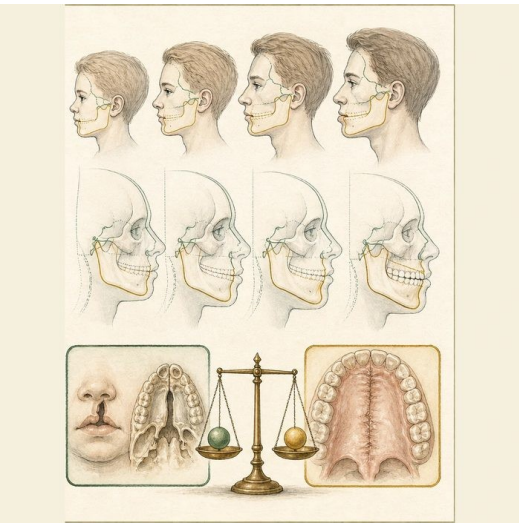
Claim ceiling: You may choose the educational planning window. You may not schedule or select a donor site for a real patient.

Handoff to the next update: We rebuilt the bone of Mateo's gum ridge and gave his canine a home. But the graft reminded us of something bigger: its timing did not change whether he might need later jaw surgery, because the whole upper jaw it sits on has been growing poorly all along. How does a repaired cleft change facial growth, and what does that do to his bite? We chase that next time.

EVIDENCE UPDATE 15 OF 20 | ORTHODONTIST (GROWTH AND OCCLUSION SEAT)

Why the Repaired Midface Grows Backward

Cleft-related midface undergrowth can reflect both underlying anatomy and treatment history, so scar alone should not be treated as a proven single cause.



Biomedical teaching illustration: Interpret Mateo's developing Class III relationship

ID	Finding supplied in the case	Why it matters
ANA15-E1	Mateo's serial records show the maxilla falling behind the mandible during growth.	The result is midface flattening and anterior crossbite.
ANA15-E2	Cleft anatomy and primary surgery both precede the later growth pattern.	More than one plausible contributor is present.
ANA15-E3	Systematic reviews find conflicting or limited evidence that one palate-repair technique determines facial growth.	Scar effects should be discussed without claiming one proven single pathway.

Decision in this update: Choose the interpretation and cite longitudinal plus evidence-limit cards.

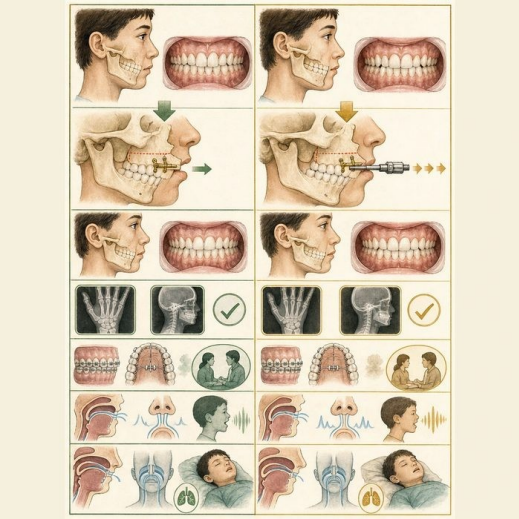
Claim ceiling: You may describe association and plausible contributors. You may not assign a single cause from this composite record.

Handoff to the next update: We found out why Mateo's midface grows backward and ends up flat, leaving an underbite as a teenager. We can name the problem, but we have not fixed it: the lip, palate, and gum graft are all done, yet his upper jaw still sits too far back. How do we correct the bite and midface later? We chase that next time.

EVIDENCE UPDATE 16 OF 20 | CRANIOFACIAL SURGEON (ORTHOGNATHIC SEAT)

Correcting the Bite and the Midface

Severe maxillary retrusion may require moving the upper jaw, but the choice between methods depends on severity, growth, stability, burden, airway, and speech.



Biomedical teaching illustration: Compare Le Fort I advancement with distraction

ID	Finding supplied in the case	Why it matters
ANA16-E1	Mateo's adolescent records show a significant anterior crossbite and maxillary retrusion not corrected by orthodontics alone.	A skeletal correction is a reasonable team discussion.
ANA16-E2	He is near skeletal maturity in the composite scenario.	Definitive jaw positioning can be considered after growth assessment.
ANA16-E3	Advancing the maxilla can change velopharyngeal relationships and hypernasality risk; comparative evidence does not establish one best method for every cleft patient.	Speech, airway, stability, and burden belong in method selection.

Decision in this update: Choose the conference process and cite skeletal plus speech-risk evidence.

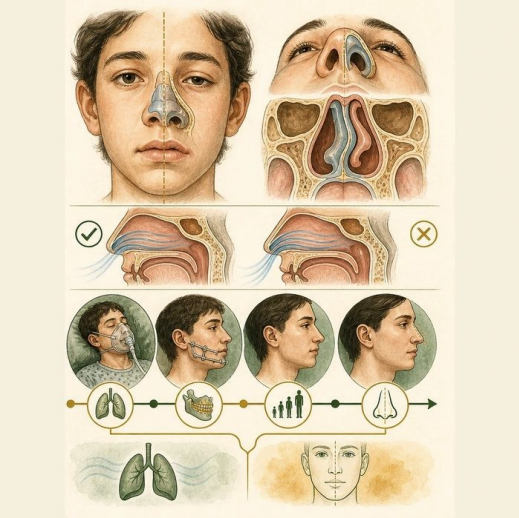
Claim ceiling: You may identify decision variables. You may not select a real operation without full imaging, examination, and shared decision-making.

Handoff to the next update: We answered how the bite and midface are corrected. But the nose sits on that midface, and even after the jaw moves forward, Mateo's nose is still asymmetric and partly blocked. How is the cleft nose itself affected, and how is it repaired? We chase that next time.

EVIDENCE UPDATE 17 OF 20 | CRANIOFACIAL SURGEON (RHINOPLASTY SEAT)

The Cleft Nose and Its Repair

A unilateral cleft can distort nasal cartilage, base, and septum, so nose care addresses breathing and symmetry across growth.



Biomedical teaching illustration: Map the cleft nose inside and out

ID	Finding supplied in the case	Why it matters
ANA17-E1	Mateo's left alar base is displaced and the nostrils are asymmetric.	The unilateral cleft affects external nasal form.
ANA17-E2	The supplied nasal examination shows septal deviation and greater resistance on one side.	The case includes a breathing concern, not appearance alone.
ANA17-E3	ACPA recommends waiting until skeletal maturity for definitive septorhinoplasty and usually completing indicated orthognathic surgery first.	Growth and jaw sequence can change the final nasal plan.

Decision in this update: Choose the sequence and cite airway plus timing evidence.

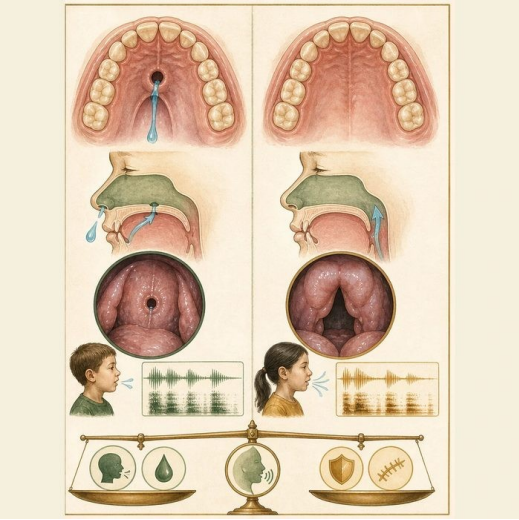
Claim ceiling: You may explain the educational sequence. You may not decide a real patient's nasal procedure or timing.

Handoff to the next update: We have now repaired lip, palate, bite, and nose. But some repairs do not fully hold. A hole can reopen in the roof of the mouth, and even a closed palate can let air leak into the nose during speech. What goes wrong after repair, and how is it fixed? We chase that next time.

EVIDENCE UPDATE 18 OF 20 | CRANIOFACIAL SURGEON (SECONDARY-SURGERY SEAT)

When a Repair Falls Short: Fistula and VPI Revision

A fistula is a tissue opening, while velopharyngeal insufficiency is a moving-valve problem; each needs different evidence and treatment planning.



Biomedical teaching illustration: Differentiate fistula from VPI in two postoperative files

ID	Finding supplied in the case	Why it matters
ANA18-E1	Case A has a visible opening in the repaired hard palate and liquid escape through the nose.	This supports a symptomatic fistula.
ANA18-E2	Case B has no palatal hole but consistent hypernasality and a gap during speech endoscopy.	This supports velopharyngeal insufficiency.
ANA18-E3	Secondary surgery can add scar and affect airway; speech surgery does not erase learned compensatory articulation.	Revision must be individualized and may still require speech therapy.

Decision in this update: Choose the correct triage and cite one differentiating finding per case.

Claim ceiling: You may distinguish the supplied mechanisms and next evaluations. You may not select a real revision procedure.

Handoff to the next update: We answered what goes wrong after repair and how it is fixed. But Mateo has now seen the surgeon, the orthodontist, the speech-language pathologist, the ENT, and more, across many years. Who does what, and when, across his whole childhood, so nothing is missed and nothing is repeated? We chase that next time.

EVIDENCE UPDATE 19 OF 20 | LEAD CRANIOFACIAL SURGEON (TEAM COORDINATOR)

Who Does What, and When: Mateo's Care Timeline

Cleft care is a coordinated timeline because each specialty acts when anatomy, function, and development make its decision useful.

Biomedical teaching illustration: Build Mateo's coordinated care timeline

ID	Finding supplied in the case	Why it matters
ANA19-E1	Mateo needs feeding and hearing support in infancy before definitive dental or jaw procedures.	Some needs are immediate while others depend on later development.
ANA19-E2	Lip and palate repair, speech review, grafting, orthodontics, jaw, and nasal decisions have different developmental triggers.	Sequence prevents conflicting or premature care.
ANA19-E3	ACPA recommends interdisciplinary coordination, family participation, and long-term outcome monitoring.	The team plan must remain shared and revisable.

Decision in this update: Choose the coordination plan and place five supplied milestones in order.

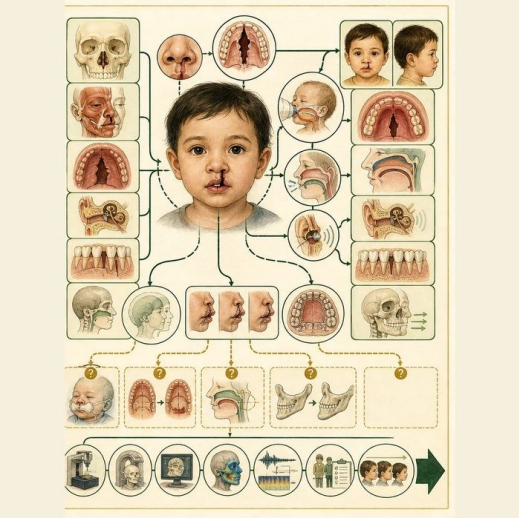
Claim ceiling: You may build the composite educational timeline. You may not imply that every patient needs every procedure.

Handoff to the next update: We can now lay every step out in order. But putting them in order means we have assembled the entire anatomical and surgical picture, from the first finding at birth to the last revision in the teens, and we have never once been handed a diagnosis. What is Mateo's complete anatomical and surgical story, told as one piece, and what does the whole picture finally tell us about what he has? We answer that next time.

EVIDENCE UPDATE 20 OF 20 | WHOLE CRANIOFACIAL TEAM (DOMAIN REPORT)

Mateo's Complete Anatomical and Surgical Story

A complete anatomical story can define structures, functions, repairs, and uncertainties while leaving treatment comparisons open to experiment.



Biomedical teaching illustration: Present Mateo's evidence-bounded anatomical synthesis

ID	Finding supplied in the case	Why it matters
ANA20-E1	The composite anatomy supports a complete unilateral left cleft lip, alveolus, and palate with a Veau III palate component.	The structural classification is well supported.
ANA20-E2	No supplied extra-anatomical pattern establishes a syndrome, and Genetics did not provide a patient-specific molecular cause.	The safest summary is isolated-appearing and evidence-bounded.
ANA20-E3	Several care choices still have competing techniques or uncertain long-term outcomes, including molding, palate protocols, VPI revision, and jaw advancement.	The next domain can turn these uncertainties into testable comparisons.

Decision in this update: Choose the final report and cite classification, claim limit, and one open comparison.

Claim ceiling: You may synthesize the complete supplied anatomical story. You may not add a syndrome, molecular diagnosis, guaranteed outcome, or universal best operation.

Handoff to the next update: The anatomical and surgical team has finished its report. But isolated and nonsyndromic is the anatomy's verdict, not the whole answer. The clinical team can describe the lifelong care, the genetics team can ask why the cleft formed at all, and the developmental team can show the moment fusion failed. We hand them our complete form-repair-consequence picture, and every team's story points to the same conclusion.