

NGN NCLEX 2026 • PEDIATRIC / MATERNAL-NEWBORN • CONGENITAL ANOMALIES

Cleft Lip & Cleft Palate

Nursing care & family teaching across the surgical continuum — pre-op feeding, post-op positioning, airway protection, and parent education.

CHEILOPLASTY

PALATOPLASTY

ESSR FEEDING

RULE OF 10S

LOGAN BOW

ELBOW RESTRAINTS

ASPIRATION RISK



SOURCE TRANSPARENCY

This topic is not covered in the uploaded personal notes. Content compiled from *Saunders Comprehensive Review for the NCLEX-RN (2026)*, *ATI Maternal-Newborn & Pediatric Nursing*, *Lippincott Pediatric Nursing Procedures*, the American Cleft Palate–Craniofacial Association (ACPA) Standards of Care, and ASHA cleft team guidelines.



Definition & Overview

WHAT IT IS • WHY IT MATTERS

A **congenital craniofacial malformation** caused by failure of embryonic structures to fuse during the 5th–12th week of gestation. Cleft lip and cleft palate may occur **independently** or **together**.

- **Cleft Lip (CL):** Failure of fusion of the maxillary and median nasal processes (gestation weeks 5–8). Unilateral or bilateral; visible at birth.
- **Cleft Palate (CP):** Failure of palatal shelves to fuse (weeks 8–12). May involve soft palate, hard palate, or both.
- One of the **most common congenital anomalies**; affects feeding, hearing, speech, dentition, and family bonding.
- Care requires a **multidisciplinary team**: surgeon, pediatrician, ENT, audiologist, speech-language pathologist, orthodontist, social worker.



Quick Stats

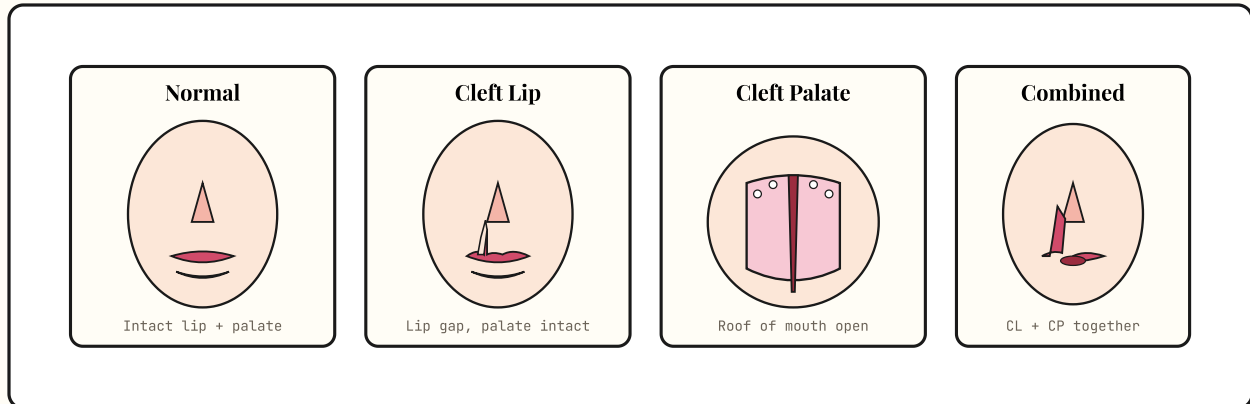
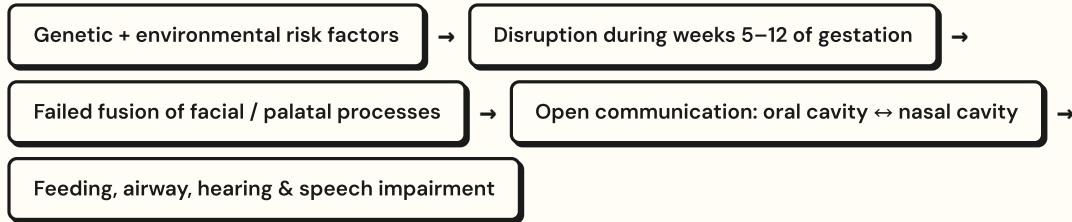
HIGH-YIELD FACTS

- **Incidence:** ~1 in 700 live births
- **CL ± CP:** more common in *males*, Asian & Native American populations
- **CP alone:** more common in *females*
- **Etiology:** Multifactorial — genetic + environmental

2

Pathophysiology (Simplified)

EMBRYONIC FUSION FAILURE → STRUCTURAL DEFECT → FUNCTIONAL CONSEQUENCES



Risk Factors

- Family history (genetic predisposition)
- Maternal **smoking** & alcohol use
- Maternal **anticonvulsants** (phenytoin)
- **Folic acid deficiency** in pregnancy
- Maternal diabetes; maternal age > 35
- Corticosteroids, retinoids during 1st trimester



Functional Consequences

- **Feeding:** cannot create suction → poor intake
- **Airway:** aspiration risk, nasal regurgitation
- **Hearing:** Eustachian tube dysfunction → recurrent otitis media
- **Speech:** hypernasality, articulation errors
- **Dentition:** malocclusion, missing/extra teeth
- **Psychosocial:** bonding, body image, family stress

3

Signs & Symptoms

AT BIRTH · FEEDING-RELATED · LONG-TERM



At Birth / Newborn

- **Visible cleft** of lip at delivery (unilateral or bilateral)
- Cleft palate detected on **oral exam** — palpate & visualize roof of mouth
- Notch in alveolar ridge
- Possible nasal deformity



Feeding-Related

- **RED FLAG** Inability to create **suction**
- **Nasal regurgitation** of formula/breast milk
- Choking, coughing, gagging during feeds
- Excessive air swallowing → distention
- **RED FLAG** Aspiration / failure to thrive



Long-Term Complications

- **Recurrent otitis media** → conductive hearing loss
- **Speech delays** — hypernasal voice, articulation issues
- **Dental anomalies** — malocclusion, missing teeth
- Frequent upper respiratory infections



Psychosocial

- Parental grief, guilt, shock at birth
- Difficulty bonding (altered facial appearance)
- Social stigma, school-age peer reactions
- Body-image concerns in adolescence

4

Surgical Repair Timeline

CHEILOPLASTY (LIP) PRECEDES PALATOPLASTY (PALATE)

	Cleft Lip Repair — <i>Cheiloplasty</i>	Cleft Palate Repair — <i>Palatoplasty</i>
TIMING	2–3 months of age (per "Rule of 10s")	6–18 months — <i>before speech development</i>
"RULE OF 10S"	≥ 10 weeks old · ≥ 10 lb weight · Hgb ≥ 10 g/dL	Not used — timed instead to speech milestones
GOAL	Cosmetic + functional lip closure; improve feeding & bonding	Restore palate integrity for normal speech, swallowing, hearing
SUTURE LINE PROTECTION	Logan bow / bar taped across lip incision	No external device; internal sutures

5 Pre-Op Care & Feeding

PRIORITY: NUTRITION + AIRWAY +
BONDING

The biggest pre-op challenge is feeding. The infant cannot generate suction — the nurse must use specialized equipment and techniques.

Specialized Feeding Equipment

- **Haberman feeder** (Special Needs Feeder) — squeezable nipple, one-way valve
- **Pigeon bottle** — Y-cut nipple, valve prevents reflux
- **Mead-Johnson cleft palate nurser** — squeezable bottle
- Soft, large-base nipple with **crosscut opening**

★ ESSR METHOD — CLEFT FEEDING

- Enlarge the nipple opening
- Stimulate the suck reflex (touch nipple to lower lip)
- Swallow normally
- Rest to allow swallowing and breathing

Feeding Position & Technique

- Hold infant **upright / semi-Fowler's** — reduces nasal regurgitation & aspiration
- Direct nipple **away from cleft**, toward intact side of mouth
- **Burp frequently** — every 15–30 mL (infants swallow excess air)
- Small, **frequent feedings**; limit feed to ~30 min to prevent fatigue
- Monitor weight gain & intake/output
- Encourage **breastfeeding** when possible — soft breast tissue conforms; supplement if needed

6 Post-Op: Cleft Lip Repair

CHEILOPLASTY + PROTECT THE SUTURE
LINE

Position

Supine or **side-lying** (on back, with head slightly elevated).

NEVER place **prone** — pressure on the lip will disrupt sutures.

Priority Interventions (ABCs + Suture Protection)

- **AIRWAY** Position to maintain airway; observe for respiratory distress
- **Logan bow / Logan bar** taped over lip — reduces tension on suture line
- **Elbow restraints ("no-no's")** — prevent infant from rubbing/touching face
→ Remove one at a time, every 2 hours, for ROM & skin checks
- **Clean suture line** with sterile saline after every feeding; pat dry
- Apply **thin layer of antibiotic ointment** per HCP order
- **Avoid:** pacifiers, straws, hard nipples, tongue depressors, oral suction near site
- Feed with **syringe with rubber tip**, dropper, or soft Breck feeder — placed in side of mouth
- **Pain management** — crying stresses the suture line (medicate scheduled, not PRN)
- **Soothe** — gentle rocking, swaddling, parent presence to minimize crying

MONITOR FOR

Bleeding, signs of infection (redness, warmth, drainage, fever), dehiscence of suture line.

7

Post-Op: Cleft Palate Repair

PALATOPLASTY • DRAINAGE + AIRWAY



Position

Prone or **side-lying** — facilitates drainage of secretions and blood from mouth.

Opposite of lip repair positioning!

Priority Interventions

- **AIRWAY** Watch for swelling, stridor, respiratory distress; have **suction at bedside** but use cautiously
- **NO hard objects in the mouth** for 7–10 days:
→ *no straws, pacifiers, spoons, tongue blades, oral thermometer, suction catheters*
- **Elbow restraints** — prevent fingers/objects in mouth (remove one at a time q2h)
- **Diet progression:** clear liquids → full liquids → **soft/pureed foods** (no hard or sharp foods)
- Use a **cup**, not a bottle, when possible (some surgeons begin cup feeding pre-op to prepare)
- Rinse mouth with **water after feeds** to keep suture line clean
- **Pain management** — scheduled analgesics; comfort measures
- Cuddle, hold, soothe — minimize crying that stresses palatal sutures



MONITOR FOR

Frequent swallowing (sign of bleeding into mouth!), excessive drooling, fever, respiratory distress, dehiscence.

8

Pharmacology & Adjunct Therapies

PAIN CONTROL • INFECTION PROPHYLAXIS • HEARING SUPPORT

Drug / Therapy	Purpose	Key Nursing Considerations
ACETAMINOPHEN (TYLENOL)	Mild–moderate post-op pain & fever control; safe in infants	Weight-based dosing (10–15 mg/kg q4–6h PRN); monitor for hepatotoxicity with overuse.
OPIOID ANALGESICS (LOW-DOSE MORPHINE, HYDROCODONE)	Moderate post-op pain (especially palate repair)	Monitor RR, sedation, bowel sounds. Respiratory depression is the priority concern in infants.
ANTIBIOTICS (AMOXICILLIN, CEPHALOSPORINS)	Prophylaxis against wound & otitis media infections	Give on schedule; monitor for diarrhea, rash; complete full course.
TOPICAL ANTIBIOTIC OINTMENT (BACITRACIN)	Applied to lip suture line after cleansing	Use thin layer with sterile cotton swab — never finger.
TYMPANOSTOMY TUBES (PE TUBES)	Drain middle ear; prevent recurrent otitis media → hearing loss	Often placed at the same time as palate repair. Teach: avoid submerging head in water; ear plugs for swimming.

9

NCLEX Test Traps ⚠️

WHERE STUDENTS LOSE POINTS

❌ Wrong Answer Triggers

- Placing infant **prone** after *lip* repair (will disrupt sutures)
- Placing infant **supine** after *palate* repair (blocks drainage)
- Offering a **pacifier** to comfort post-op (hard object in mouth!)
- Using a **straw** or **spoon** deep in mouth post-palate repair
- **Removing both elbow restraints simultaneously**
- Deep **oral suctioning** after palate repair (trauma to suture line)
- Waiting until infant cries for pain medication ("PRN only")
- Feeding with a regular bottle / regular nipple pre-op

✅ Right Answer Cues

- **Lip:** supine or side-lying + Logan bow + elbow restraints
- **Palate:** prone or side-lying + soft diet + no hard objects
- Remove elbow restraints **one at a time, every 2 hours**, for ROM
- Clean lip suture line with **sterile saline** after every feed
- Hold infant **upright** for all feedings
- **Burp frequently** — every 15–30 mL
- **Frequent swallowing** = early bleeding clue (palate)
- Medicate pain **on schedule** to prevent crying

📌 PRIORITY SETTING TIP

When a question asks "what is the *priority* intervention?" — apply **ABCs first**. Airway protection > suture protection > pain > nutrition > bonding. For palate post-op, **frequent swallowing** trumps fever, drooling, or pain because it signals occult bleeding.

10

Patient & Family Education

EMPOWER PARENTS • PROMOTE LONG-TERM OUTCOMES



Feeding at Home

- Demonstrate the **ESSR method**; have parents return–demonstrate
- Use the **special bottle/nipple** consistently
- Hold baby **upright**; burp every 15–30 mL
- Feed sessions ≤ 30 minutes to prevent fatigue
- Track **wet diapers, stools, weight gain** as nutrition markers



Post-Op Home Care

- Keep **elbow restraints in place** as instructed
- Clean suture line with sterile saline; report redness, drainage, fever
- Use only **soft objects** in mouth (no straws, pacifiers, hard toys)
- Medicate for pain **before** it becomes severe
- Follow-up appointments with the entire cleft team



Hearing & Ear Care

- Watch for signs of **otitis media**: ear-pulling, fever, irritability
- Regular **audiologic evaluations** (every 6–12 months)
- Notify HCP early — untreated OM → hearing loss → speech delay



Speech, Dental & Team Care

- Begin **speech–language therapy** as recommended (often by 18–24 months)
- Early **dental and orthodontic** follow-up
- **Genetic counseling** for future pregnancies
- Connect families with **support groups** (ACPA, Cleft Palate Foundation)
- Address **parental grief & bonding** — encourage skin-to-skin, eye contact

11 Memory Boosters & Mnemonics

PATTERNS THAT STICK UNDER EXAM PRESSURE

"Rule of 10s" — Cleft Lip Repair

Readiness

- 10 weeks of age ($\geq$)
- 10 pounds of weight ($\geq$)
- 10 g/dL hemoglobin ($\geq$)

"ESSR" — Cleft Feeding Method

- E nlarge the nipple
- S timulate the suck
- S wallow normally
- R est to breathe

"LIP up, PALATE down"

Cleft LIP repair → supine / side-lying
(face up, protect lip)

Cleft PALATE repair → prone / side-lying
(face down, drain mouth)

"Soft Things Only" — Post-Op Mouth Rules

- S oft food / liquid diet
- T ongue depressors, straws, pacifiers — none!
- O nly water rinse after feeds
- NO oral suction; no spoons in deep mouth

"Frequent Swallowing = Bleeding"

The infant who keeps swallowing post-palatoplasty may be silently swallowing blood from the suture line — NOTIFY HCP IMMEDIATELY.

12

NCJMM Clinical Judgment Scenario

SIX-STEP NEXT GEN NCLEX FRAMEWORK

Case: A 3-day-old full-term newborn with a unilateral cleft lip and cleft palate is being prepared for discharge home. The mother tearfully tells the nurse, "He keeps choking when I feed him, and milk comes out of his nose. I'm so afraid I'll hurt him." Vitals stable. Weight is 200 g below birth weight.

STEP 1

Recognize Cues

Unilateral cleft lip + palate; choking and nasal regurgitation; 200 g weight loss; maternal anxiety/grief; difficulty feeding.

STEP 2

Analyze Cues

Open communication between mouth and nose prevents suction → poor intake + aspiration risk. Maternal distress threatens bonding and feeding success.

STEP 3

Prioritize Hypotheses

#1 Risk for aspiration (airway). **#2** Inadequate nutrition / failure to thrive. **#3** Risk for impaired parent-infant attachment.

STEP 4

Generate Solutions

Provide Haberman / Pigeon bottle; teach ESSR method; upright feeding position; frequent burping; daily weights; refer to lactation; emotional support & cleft team referral.

STEP 5

Take Actions

Demonstrate ESSR with special bottle; have mother return-demonstrate; teach burping technique; verify her ability to identify aspiration; schedule cleft team follow-up; provide written instructions and support group info.

STEP 6

Evaluate Outcomes

Infant feeds without choking; intake meets 100–120 mL/kg/day; steady weight gain; no aspiration events; mother demonstrates competence and confidence; bonding behaviors observed.