NURSING CARE PLAN The Infant with a Cleft Lip and/or Palate

GOAL	INTERVENTION	RATIONALE	EXPECTED OUTCOME
Preoperative Care			
1. Risk for Aspiration (Breast Milk, Formula, or Mucus) related to anatomic defect			
	NIC Priority Intervention: **Aspiration Precautions:** Prevention or minimization of risk factors in the patient at risk of aspiration.		NOC Suggested Outcome: **Airway Maintenance:** Toleration of enteral feedings without aspiration.
The infant will have no episodes of gagging or aspiration.	■ Assess respiratory status and monitor vital signs at least every 2 hours. ■ Position on side after feedings. ■ Feed slowly and use adaptive equipment as needed. ■ Burp frequently (after every 15–30 mL of fluid). ■ Position upright for feedings. ■ Keep suction equipment and bulb syringe at bedside.	■ Allows for early identification of problems. ■ Prevents aspiration of feedings. ■ Facilitates intake while minimizing risk of aspiration. ■ Helps to prevent regurgitation and aspiration. ■ Minimizes passage of feedings through cleft. ■ Suctioning may be necessary to remove milk or mucus.	The infant exhibits no signs of respiratory distress.
2. Ineffective Family Coping related to situational crisis of birth of a child with a defect			
	NIC Priority Intervention: **Family Involvement:** Facilitating family participation in the emotional and physical care of the child.		NOC Suggested Outcome: **Positive Coping:** Extent of coping mechanisms and ability to perform child's physical and emotional care.
Parents will begin bonding process with the infant.	■ Help parents to hold the infant and facilitate feeding process. ■ Point out positive attributes of infant (hair, eyes, alertness, etc). ■ Explain surgical procedure and expected outcome. Show pictures of other children's cleft lip repair.	■ Contact is essential for bonding. ■ Helps parents see the child as a whole, rather than concentrating on the defect. ■ Eliminating unknown factors helps to decrease anxiety.	Parents hold, comfort, and show concern for the infant.
The family's coping ability will be maximized. Parents will verbalize the nature and sequelae of the defect.	■ Assess parents knowledge of the defect, their degree of anxiety and level of discomfort, and the interpersonal relationships among family members. ■ Explore the reactions of extended family members. ■ Support open visitation. ■ Encourage parents to participate in caretaking activities (holding, diapering, feeding).	■ Helps to determine the appropriate timing and amount of information to be given regarding the child's defect. ■ Extended family is an important source of support for most parents of a newborn. Family members can often help promote acceptance and compliance with the treatment plan. ■ Allows parents to continue the bonding process. ■ Participation in infant care decreases anxiety and provides parents with a sense of purpose.	The family demonstrates improved coping ability before discharge. Parents receive necessary support to care for their infant.

NURSING CARE PLAN The Infant with a Cleft Lip and/or Palate (continued)

GOAL	INTERVENTION	RATIONALE	EXPECTED OUTCOME
2. Ineffective Family Coping related to situational crisis of birth of a child with a defect (continued)			
	■ Provide information about the etiology of cleft lip and palate defects and the special needs of these infants. Encourage questions. ■ Refer to parent support groups.	■ Concrete information allows parents time to understand the defect and reduces guilt. ■ Support groups allow parents to express their feelings and concerns, to find people with concerns similar to their own, and to seek additional information.	
3. Altered Nutrition: Less Than Body Requirements related to the infant's inability to ingest nutrients			
	NIC Priority Intervention: **Nutrition Management:** Provision of a balanced dietary intake of foods and fluids.		NOC Suggested Outcome: **Nutrition Status:** Amount of food and fluid taken into the body over a 24-hour period.
The infant will gain weight steadily.	■ Assess fluid and calorie intake daily. Assess weight daily (same scale, same time, with infant completely undressed).	■ Provides an objective measurement of whether the infant is receiving sufficient caloric intake to promote growth. Using the same scale and procedure when weighing the infant provides for comparability between daily weights.	The infant maintains adequate nutritional intake and gains weight appropriately.
	■ Observe for any respiratory impairment.	■ Any symptoms of respiratory compromise will interfere with the infant's ability to suck. Feedings should be initiated only if there are no signs of respiratory distress.	
	■ Provide 100–150 cal/kg/day and 100–130 mL/kg/day of feedings and fluid. If the infant needs an increased number of calories to grow, referral to a nutritionist should be made. Formulas with higher calorie concentrations per ounce are available without increasing total fluids.	■ Provides optimal calories and fluids for growth and hydration.	
	■ Facilitate breastfeeding.	■ Breast milk is recommended as the best food for an infant. The process of breastfeeding helps to promote bonding between mother and infant.	Successful breastfeeding is achieved if desired.
	■ Hold the infant in a semisitting position.	■ Makes swallowing easier and reduces the amount of fluid return from the nose.	
	■ Give the mother information on breastfeeding the infant with a cleft lip and/or palate such as plugging the cleft lip and eliciting a let-down reflex before nursing.	■ Information and specific suggestions may encourage the mother to persist with breastfeeding.	
	■ Contact the LaLeche League for the name of a support person.	■ The LaLeche League promotes breastfeeding for all infants. It can provide support people with experience who will aid the mother.	

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NURSING CARE PLAN The Infant with a Cleft Lip and/or Palate (continued)

GOAL	INTERVENTION	RATIONALE	EXPECTED OUTCOME
3. Altered Nutrition: Less Than Body Requirements related to the infant's inability to ingest nutrients (continued)			
	■ If the mother is unable to breast-feed (or prefers not to), initiate bottle feeding: ■ Hold infant in an upright or semisitting position for feeding. ■ Place nipple against the inside cheek toward the back of the tongue. May need to use a premature nipple (slightly longer and softer than regular nipple with a larger opening) or a Brecht feeder (an oval bottle with a long, soft nipple). ■ Feed small amounts slowly. ■ Burp frequently, after 15–30 mL of formula has been given. ■ Initiate nasogastric feedings if the infant is unable to ingest sufficient calories by mouth.	■ Facilitates swallowing and minimizes the amount of fluid return from the nose. ■ Use of longer, softer nipples makes it easier for the infant to suck. A Brecht feeder decreases the amount of pressure in the bottle and makes the formula flow more easily. ■ Small amounts and slow feeding do not tire the infant as quickly as do larger amounts given at a faster rate. They also decrease the energy used during feeding. ■ Frequent burping prevents the accumulation of air in stomach, which can cause regurgitation or vomiting. ■ Adequate nutrition must be maintained. Use of a feeding tube allows the infant who has difficulty with oral feeding to receive adequate nutrition for growth.	Feeding provides necessary nutrients and is a positive experience for parents and infant.
Postoperative Care			
1. Risk for Infection related to location of surgical procedure			
	NIC Priority Intervention: **Infection Control:** Minimizing the acquisition and transmission of infectious agents.		NOC Suggested Outcome: **Risk Control:** Actions to eliminate or reduce actual, personal, or modifiable health risks.
The infant's mucosal tissue will heal without infection.	■ Assess vital signs every 2 hours. ■ Assess oral cavity every 2 hours or as needed for tenderness, reddened areas, lesions, or presence of secretions. ■ Cleanse suture line with normal saline or sterile water if ordered. ■ Cleanse the cleft areas by giving 5–15 mL of water after each feeding. ■ If a crust has formed, use a cotton swab to apply a half-strength peroxide solution. ■ Apply antibiotic cream to suture line as ordered.	■ Elevated temperature may indicate infection. ■ Aids in identifying infection. ■ Helps decrease the presence of bacteria. ■ Prevents accumulation of carbohydrates, which encourage bacterial growth. ■ Helps loosen the crust, aiding in removal. ■ Counteracts the growth of bacteria.	The infant remains free of infection in the oral cavity. Tissues remain intact and pink. Healing process progresses without adverse events in postoperative period.

NURSING CARE PLAN The Infant with a Cleft Lip and/or Palate (continued)

GOAL	INTERVENTION	RATIONALE	EXPECTED OUTCOME
1. Risk for Infection related to location of surgical procedure (continued)			
	■ Use careful handwashing and sterile technique when working with suture line.	■ Prevents the spread of microorganisms from other sources.	
2. Ineffective Breathing Pattern related to surgical correction of defect			
	NIC Priority Intervention: **Airway Management:** Facilitation of patency of air passages.		NOC Suggested Outcome: **Vital Signs Status:** Temperature, pulse, respiration, and blood pressure within expected range for the infant/child.
The infant will maintain an effective breathing pattern.	■ Assess respiratory status and monitor vital signs at least every 2 hours. ■ Apply a cardiorespiratory monitor. ■ Keep suction equipment and bulb syringe at bedside. Gently suction oropharynx and nasopharynx as needed. ■ Provide cool mist for first 24 hours postoperatively if ordered. ■ Reposition every 2 hours. ■ Allows for early identification of problems.	■ Allows for early identification of problems. ■ Enables early detection of abnormal respirations, facilitating prompt intervention. ■ Gentle suctioning will keep the airway clear. Suctioning that is too vigorous can irritate the mucosa. ■ Moisturizes secretions to reduce pooling in lungs. Moisturizes oral cavity. ■ Ensures expansion of all lung fields.	The infant shows no signs of respiratory infection or compromise.
3. Impaired Tissue Integrity related to mechanical factors			
	NIC Priority Intervention: **Wound Care:** Prevention of wound complications and promotion of wound healing.		NOC Suggested Outcome: **Wound Healing:** The extent to which cells and tissues have regenerated following intentional closure.
Lip and/or palate will heal with minimal scarring or disruption.	■ Position the infant with cleft lip repair on side or back only. ■ Use soft elbow restraints. Remove every 2 hours and replace. Do not leave the infant unattended when restraints are removed. ■ Maintain metal bar (Logan bow) or Steri-Strips placed over cleft lip repair. ■ Avoid metal utensils or straws after cleft palate repair. ■ Keep the infant well medicated for pain in initial postoperative period. Have parents hold and comfort the infant. ■ Provide developmentally appropriate activities (e.g., mobiles, music).	■ Prone position could cause rubbing on suture line. ■ Prevents the infant's hands from rubbing surgical site. Regular removal allows for skin and neurovascular checks. ■ Maintaining suture line will minimize scarring. ■ These devices may disrupt suture line. ■ Good pain management minimizes crying, which can cause stress on suture line. Increases bonding and soothes the child to decrease crying. ■ Soothes and keeps the infant calm.	Lip/palate heals without complications.

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NURSING CARE PLAN The Infant with a Cleft Lip and/or Palate (continued)

GOAL	INTERVENTION	RATIONALE	EXPECTED OUTCOME
4. Knowledge Deficit (Parent) related to lack of exposure and unfamiliarity with resources			
	NIC Priority Intervention: Teaching, Disease Process: Assisting the patient to understand information related to cleft lip/palate.		NOC Suggested Outcome: Knowledge: Extent of understanding conveyed about cleft lip/palate treatment.
Before discharge, parents will verbalize home care methods for care of the infant with cleft lip and palate defect.	■ Explain care and treatment (both short term and long term). Discuss potential complications. ■ Demonstrate feeding techniques and alternatives. Allow parents to demonstrate before discharge. ■ Provide written instructions for follow-up care arrangements. ■ Introduce the parents (if possible) to a primary care provider in the setting where the infant will receive follow-up care after discharge.	■ Assists the family to deal with the physical and psychosocial aspects of a child with a congenital defect. ■ Provides visual instructions. Redemonstration confirms learning. ■ Written instructions reinforce verbal instruction and provide a reference after discharge. ■ Continuity of care is important. Since the infant will require long-term follow-up, a contact with the new provider is helpful.	Parents accurately describe and demonstrate feeding techniques to facilitate optimal growth of the infant; describe interventions if respiratory distress occurs; and take the written instructions home with them on discharge.
5. Altered Nutrition: Less Than Body Requirements related to inability to ingest nutrients			
	NIC Priority Intervention: **Nutrition Management:** Promotion of a balanced dietary intake of foods and fluids.		NOC Suggested Outcome: **Nutritional Status:** Extent to which nutrients are available to meet metabolic needs.
The infant will receive adequate nutritional intake.	■ Maintain intravenous infusion as ordered. ■ Begin with clear liquids, then give half-strength formula or breast milk as ordered. ■ Use Asepto syringe or dropper in side of mouth. ■ Do not allow pacifiers. ■ Give high-calorie soft foods after cleft palate repair.	■ Provides fluid when NPO. ■ Ensures adequate fluids and nutrients. ■ Avoids suture line and resultant accumulation of formula in that area. ■ Sucking can disrupt suture line. ■ Rough foods, utensils, and straws could disrupt the surgical site.	The infant receives adequate nutritional intake. Infant resumes usual feeding patterns and gains weight appropriately.