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**UNIVERSITY**

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# Cleft lip and cleft palate

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## Cleft Lip (cheiloschisis)-

**A cleft lip result from failure of fusion of maxillary process with nose elevation on frontal prominence.**

- ❖ **The extent of defect varies from a notch in the lip (**partial or incomplete cleft**) to a large cleft reaching the floor of the nose (**complete cleft**).**
- ❖ **It can occur on unilateral or bilateral.**

## Cleft Palate (Palatoschisis) –

**It result from failure of fusion of the hard palate with each other and soft palate.**

**❖ It may be unilateral or bilateral.**



Cleft Lip - Bilateral



Cleft Lip - Right



Cleft Lip - Left



Cleft Lip - Cleft palate -  
Right



Cleft Lip - Cleft palate - Left



Cleft Lip - Cleft palate -  
Bilateral



Cleft palate



Cleft soft palate

## Etiology-

- **Medication by mother during pregnancy like anticonvulsant.**
- **Exposure to virus or chemicals while fetus is developing in the womb.**
- **Exposure to x- ray.**
- **maternal intake of alcohol.**
- **Maternal, smoking during pregnancy.**

## PATHOPHYSIOLOGY-

- **A failure of maxillary process of fuse with the elevations on the frontal prominence during the sixth weeks of gestations.**
- **Hard and soft palates are completed in the first trimester.**
- **Congenital defects: TEF, omphalocele, trisomy 13.**
- **Cause: multifactorial ( environmental and genetic influences )**



# Types of cleft lip and palate-

- 1. Pre-alveolar**
- 2. Post-alveolar**
- 3. Combined**

# Complication-

- Feeding problem
- Respiratory infection
- Ear infection/ hearing loss
- Speech problem
- Dental problem

# Diagnostic Evaluation-

- ❖ **History collection**
- ❖ **Physical examination**
- ❖ **Prenatal ultrasound**
- ❖ **Prenatal counseling**
- ❖ **Visual assessment of defects at birth and by palpation**
- ❖ **MRI to detect the extent of abnormality; evaluation of infant's ability to suck, swallow and breathe.**
- ❖ **A genetic evaluation to determine reoccurrence.**

## Management-

### Surgical Management-

- ❖ Cleft Lip- It may require one or two surgeries depending on the severity of defect.
  - Initial surgery is usually performed at the age of 3 month
  - Z- plasty (repair of cleft lip)
  
- ❖ Cleft palate- repair often requires multiple surgeries over the course of 18 years.
  - The 1<sup>st</sup> surgical repair usually occurs when the baby is b/w 6-12 months .

## Nursing management –

- 1. Care of the baby at birth**
- 2. Care of the baby before surgery**
- 3. Care of the baby after surgery**

## Care of the baby at birth-

- ❖ Cleft lip and palate is detected immediately after birth, during initial neonatal assessment.**
- ❖ There is a disfiguring defect soon after birth, the nurse must explain to the parents about possibility of defect correction.**

- ❖ If the baby is unable to suck the breast, expressed breast milk may be given using syringe with a rubber tube.**
- ❖ Mother and family members should be demonstrated the various techniques that can be used for feeding the baby at home.**
- ❖ Explain to parents about the risk of aspiration due to cleft palate.**

- ❖ Burp the baby in between the feeds and after feeding.**
- ❖ Parents must be explained the importance of adequate nutrition for growth and development.**
- ❖ The baby must be given all essential care including immunization, warmth, hygiene and prevention of infection.**

## Care of the baby before surgery-

- **Consent must be taken.**
- **All the investigation should be done.**
- **The baby must be kept NPO.**

## Care of the baby after surgery-

- ❖ **Immediately after the surgery, closely observation and monitor vital sign.**
- ❖ **Observe for any bleeding.**
- ❖ **The surgical site is to be protected from any injury.**



- ❖ Administer the prescribed analgesic.**
- ❖ Prevent infection at the site, by cleaning the operated area gently using aseptic techniques.**
- ❖ Do not allow the baby to put any object in mouth, as this may injure the surgical repair.**

**THANK YOU**