

## SNS COLLEGE OF ALLIED HEALTH SCIENCES



SNS Kalvi Nagar, Coimbatore - 35 Affiliated to Dr MGR Medical University, Chennai

**DEPARTMENT:** ALLIED HEALTH SCIENCES

**COURSE NAME: ORTHOPEDICS** 

**Topic:CONGENITAL TALIPES EQUINO VARUS** 



## Introduction



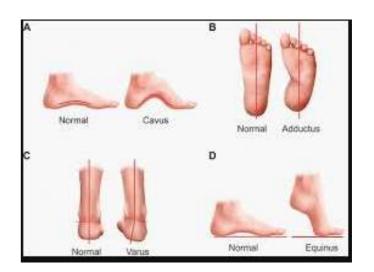
Congenital talipes equino varus is also known as club foot

- Congenital- at birth
- Talipes-ankle & foot
- Equino-heel is elevated
- Varus-foot is turned inwards

### **Definition**

Clubfoot, also known as Congenital Talipes
Equinovarus, is a complex, congenital deformity of the
foot.It is a common idiopathic deformity of the foot
that presents in neonates.







# Etiology, Risk factors & Complications



• The cause of clubfoot is not known, but it may be due to genetics and environmental factors.

#### **RISK FACTORS**

- Family history
- Secondary causes
- Environmental factors
- Insufficient amniotic fluid during pregnancy

#### COMPLICATION

- Movement-The foot may be a little stiff and not bend easily.
- **Leg length-** The leg with clubfoot may be slightly shorter, but this usually doesn't stop a child from learning to walk.
- **Shoe size-**The foot may be up to 1 1/2 shoe sizes smaller than the other foot.
- Calf size- The muscles of the calf on the side with clubfoot may always be smaller than those on the other side.
- Foot shape-It's common for the foot to have a bean shape and a small inward point, even after treatment.



# Signs & Symptoms



#### **DEFORMITY:**

- Cavus- exaggerated medial longitudinal arch at midfoot
- Forefoot adduction- tarsometatarsal junction
- Heel varus- hind foot rotated inward at talocaneonavicular joint
- Heel equinus-foot fixed in plantar flexion in plantar flexion at ankle joint
- Midfoot supination



# Assessment 1



- 1. Explain the standard form of CTEV?
- 2. Mention the other name of CTEV
- 3.Etiological factor



# Diagnosis



- clubfoot can be seen before birth during a routine ultrasound exam in week 20 of pregnancy
- History collection- about genetic factors
- Physical examination- after birth



# Assessment 2



• Role play about symptoms-1



## **Treatment**



- 3 stages:
- Correct the deformity
- Maintenance of the correction until normal muscle balance is developed
- Followup observation to detect the reoccurence.

### Soft tissue operation:

- Release of contractures
- Tendon elongation
- Tendon transfer
- Restoration of normal bony relationship

### Bony operation: types

- Osteotomy: to correct foot deformity or internal tibial torsion
- Wedge excision
- Arthrodesis
- Salvage operation to restore shape



# NONOPERATIVE METHOD



- Kites method Kite's Method of treatment consists of a series of manipulations and castings followed by night splinting with the feet held in dorsiflexion and slight abduction. Kite reported good outcomes
- **Ponseti method:** Stretches and casts on your child's leg to correct the curve.
- **French method:** Stretches and splints on their leg to correct the curve.
- Bracing: Uses special shoes to keep their foot at the proper angle.









# Assessment-3



## Quiz about

- 1. Surgical managements
- 2. Non surgical management