

# CLUB FOOT

**- MS. PREETI SAMUEL**

# CLUB FOOT

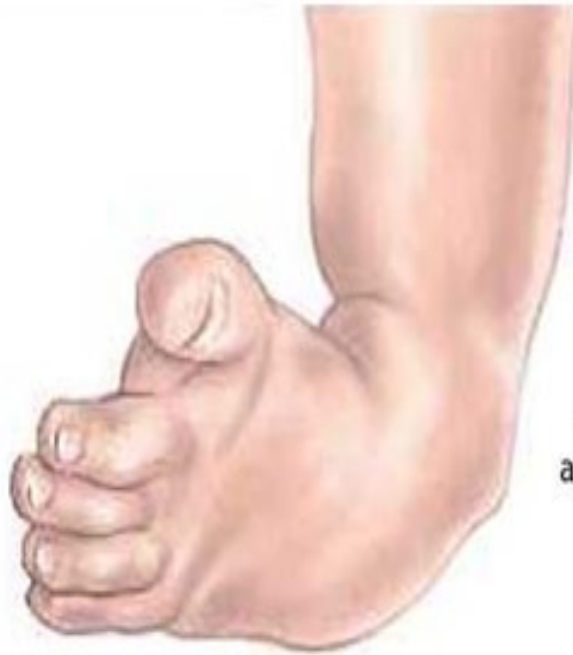
## **INTRODUCTION-**

It is a congenital anomaly of the foot and lower leg, involving abnormalities of the bony architecture and soft tissue.

The foot is divided into the forefoot (toes and metatarsals), midfoot (cuneiform, navicular, cuboid) and the hind foot (talus and calcaneus).







Short tendons  
are lengthened



Long tendons  
are shortened



## **DEFINITION-**

The term club foot is used to describe a common deformity in which the foot is twisted out of its normal shape or position .

Any foot deformity, involving the ankle is known as talipes derived from talus meaning ankle and 'pes' meaning foot.



# TYPES

## 1. TALIPES VARUS-

- In this type, there is an inversion or bending inward of foot.

## 2. TALIPES EQUINUS-

- There is plantar flexion and toe is lower than heel.

## 3. TALIPES CALCANEOS-

- There is dorsiflexion and toe is higher than heel.

## 4. TALIPES EQUINOVARUS-

- There is malalignment of calcaneotalar-navicular complex.



# INCIDENCE AND ETIOLOGY

## **INCIDENCE**

- It is twice more commonly in males than in females.
- It is bilateral in 50% of cases.

## **ETIOLOGY-**

- Genetically susceptible
- Teratogenic agents (like sodium aminopterin)
- Oligohydromnios
- Congenital



# CLINICAL FEATURES

- Adduction of the forefoot
- Contracture of Achilles tendon leading to plantar flexion of the foot.
- The foot is also inverted so the lateral border is directed downwards.
- Development of lower leg is also affected and the calf muscles appear thin and atrophic.





## DIAGNOSTIC EVALUATION-

- X-ray

## MANAGEMENT-

### 1. **Non-operative management –**

- Easy or corrective club foot which is corrected with manipulation, casting and splintage alone.
- Resistant clubfoot, which is corrected with manipulation, casting and splintage and relapse quickly following seemingly successful manipulative treatment. These club foot require early operative management.



# SPLINTAGE FOR CLUB FOOT





## 2. **Surgical management-**

- Surgery may be needed to adjust the tendons, ligaments and joints in the foot / ankle.
- Surgery is usually done at 9-12 months of age, surgery corrects all club foot deformities at the same time.
- After surgery a cast holds the clubfoot in correct position while it heals.
- It is still possible for the muscles in the child's foot to return to the clubfoot position so special shoes or braces are used for up to a year or more after surgery.
- Surgery will likely result in a stiffer foot than a non-surgical treatment.



- **During surgery, the structures to be released or lengthened are:**
- Achilles tendon (ETA)
- Tendon sheaths of the muscles crossing the subtalar joint
- Posterior ankle capsule and deltoid ligament
- Inferior tibiofibular ligament
- Fibulocalcaneal ligament
- Capsules of the talonavicular and subtalar joints
- Division of associated ligaments around the subtalar joints
- Plantar fascia and intrinsic muscles



# FOLLOW UP

- The transfixion pins usually are removed in 3-6 weeks. The foot requires splintage in appropriate footwear for 6-12 months.



THANK YOU

