

Ankle & Foot Disorders

Adults with foot and ankle problems often present complaining of pain, swelling, deformity and impaired function.

TALIPES EQUINOVARUS (CLUB FOOT)

The term 'talipes' is derive from talus (Latin = ankle bone) and pes (Latin = foot).

hind-foot or heel is higher than the forefoot.

Mid- & fore-foot adducted and supinated, and points downwards and inwards (varus).

The skin and soft tissues of the calf and the medial side of the foot are short and underdeveloped.



Incidence

The abnormality is relatively common, the incidence ranging from 1–2 per 1000 births; boys are affected twice as often as girls and the condition is bilateral in one-third of cases.

Diagnosis

The severity can be assessed at birth and the progress of treatment can be monitored by Pirani score.

X-ray is used mainly to assess progress after treatment in the older child and are rarely used in the initial assessment and management.

Treatment

Treatment should begin early, preferably within the first 2 weeks after birth. This consists of manipulation repeated weekly.

*Ponseti method for tratment of club foot ([video, click here](#)).

Ponseti method consis of three steps:

1-Casting: The process of manipulating the feet and applying cast once a week for 6 weeks, it the first step of deformity correction.

2-Tenotomy: 90% of infants with clubfoot need tenotomy, it is a minor procedure done under local ansthesia. It is done before last casting. ([Video, click here](#))



3-Bracing: for keeping correction and prevent recurrence :

-in the first 3 months: 23 hours per day.

-for first 3-5 years: 12 hours per day.



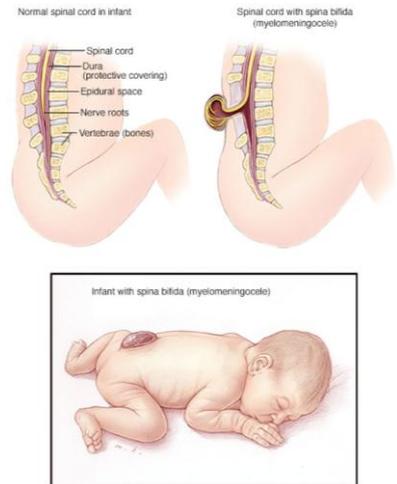
What happens if the condition is not corrected?

If the condition is not corrected early, secondary growth changes occur in the bones; these are permanent.

Is the condition is curable?

Even with treatment the foot is liable to be short, the calf may remain thin and a below-knee length discrepancy of less than 2 cm may occur.

Note: The infant must always be examined for associated disorders such as congenital hip dislocation and spina bifida.



PES PLANUS (FLAT FOOT)

a flat-foot deformity, the medial border of the foot is in contact (or nearly in contact) with the ground; the heel becomes valgus and the foot pronates at the subtalar–midtarsal complex.



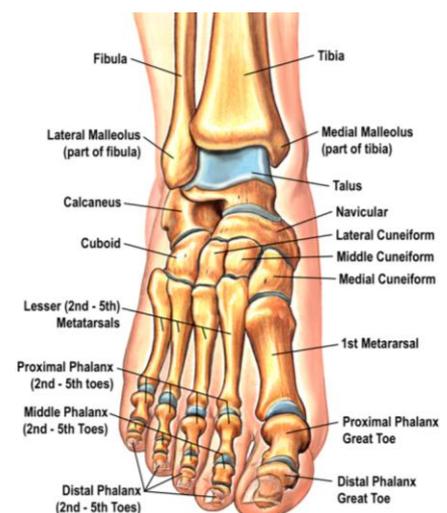
Cause:

*Congenital basis

*Muscle weakness or paralysis.

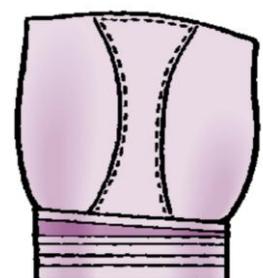
Clinical features:

In children, flat feet are usually symptomless, but the parents commonly complain that the uppers of the shoes persistently bulge inwards. Children who complain about calf muscle pains, arch pain, or any other pains around the foot area may be developing or have developed flat feet. All infants have flat feet for a year or two after they begin to stand.



Treatment:

In children under 3 years treatment is not required. In children over 3 years the accepted method of treatment is to tilt the shoe slightly to the lateral side by inserting a wedge, base medially, between the layers of the heel (not the sole)



PES CAVUS (high arch foot)

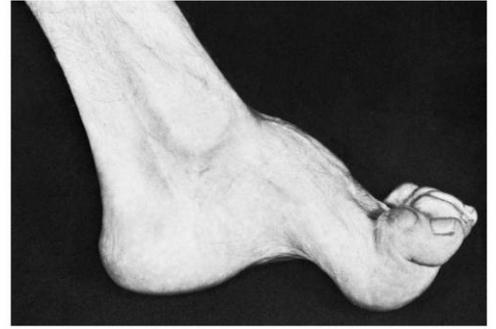
the longitudinal arch of the foot is accentuated.

Cause:

*Congenital basis.

*Familial.

*Neurological disorder causing muscle imbalance. For instance, it is often associated with a minor degree of spinal dysraphism, or it may follow poliomyelitis.



Clinical features:

The deformity often becomes evident in childhood. It may affect one foot or both feet. In some cases the symptoms are negligible. When symptoms do arise they may take three forms:

1. Painful callosities beneath the metatarsal heads
2. Tenderness over the toes from pressure against the shoe.
3. Pain in the tarsal region from osteoarthritis of the tarsal joints.

On examination the deformity is characteristic and easily recognised.

Treatment:

*In many cases treatment is not required.

*Mild symptoms: regular chiroprody and by the provision of a resilient pad beneath the metatarsal heads to distribute the weight more widely.

*Severe symptoms: operation may be required. The nature of the operation should depend upon the cause of the main symptoms.