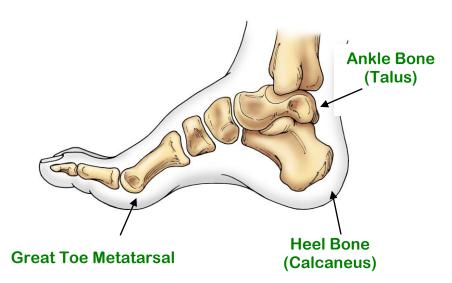
## **CAVUS FOOT DEFORMITY**

The foot is composed of 25 bones that are held in place by the ligaments and muscles of the lower leg.

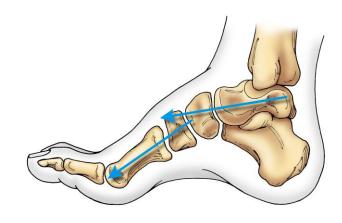
Orthopaedic surgeons refer to a foot as having a normal arch if the x-ray shows the ankle bone pointing directly to the great toe. The arch of a growing foot may become "deformed or accentuated" by an excessive or weakened pull of the muscles on the bones.



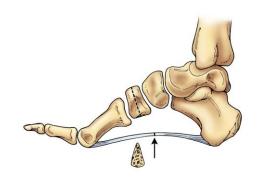
If on x-ray the ankle bone does not point down to the great toe but straight ahead, the foot is called a "cavus" foot. A thorough

neurological examination and special tests may be performed to identify the reason for the muscle weakness and foot deformity.

If a reason is established for the cavus feet, then a better prognosis for the patient can be formulated.



A cavus foot may cause pain, frequent ankle sprains, abnormal calluses on the bottom and side of the foot and excessive shoe wear. Since a cavus foot has less flexibility than a normal foot, orthotics may be used for a brief time with a mild foot deformity until a surgical decision is desired by the family. Surgery may be offered to the child who is experiencing symptoms. In most cavus feet, there is a band on the bottom of the foot and shortened



Medial Cuneiform & Bone Graft

Plantar Fascia & Muscles Lengthened

muscles that have negatively altered the development of the arch. These structures must be lengthened as the first step. The next most common procedure is to realign the ankle bone with the great toe bone. The medial cuneiform bone is located in the middle of the arch and is frequently cut and a triangular piece of bone inserted. The alignment

of the heel bone (calcaneus) is also inspected and if necessary may be adjusted as part of the surgery. Postoperatively, 4-6 weeks are spent in a non-weight bearing cast until there is evidence of good bone healing. Then the foot will be placed in a walking cast for an additional 4-6 weeks. After the healing is complete (10-12 weeks), the cast is removed and physical therapy will be started to strengthen the leg muscles and reestablish a better walking pattern. The patient will normally be followed well into adulthood to ensure that the deformity does not recur.



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