

SEVER'S DISEASE (CALCANEAL APOPHYSITIS)

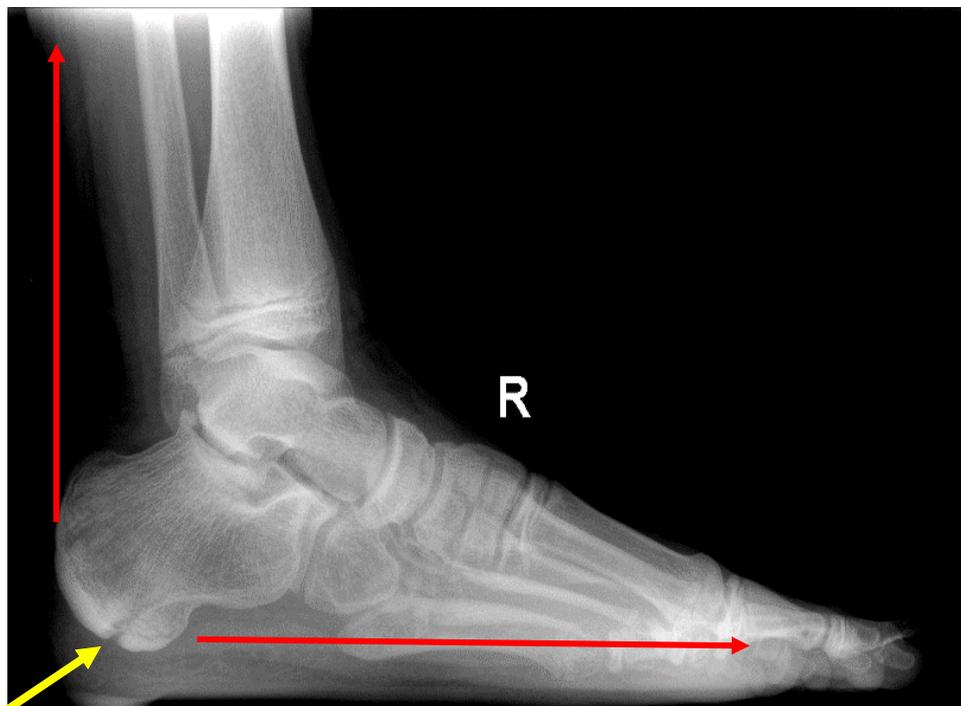
Calcaneal apophysitis and Sever's disease describe an irritation to the growth center (apophysis) in the heel bone (calcaneus) and disturbance to the growing area at the back of the heel bone (calcaneus) where the strong achilles tendon and plantar fascia ligament attaches. It is most common between the ages of 10 to 14 years of age.

When we are very young, most of our bones are made up of cartilage. The bones enlarge from this growth plate continually to eventually form our adult bones.

This type of condition is not limited to the heel bone. These are one of several different 'osteochondroses' that can occur in other parts of the body, such as at the knee (Osgood-Schlatters Disease).

Patients who have calcaneal apophysitis generally are participating in running sports (soccer, football), have a very tight Achilles tendon, pronate excessively (increased stress of plantar fascia), and generally are growing very quickly.

When these 2 soft tissue structures aggressively create too much torque on this growth center it can sometimes fragment. This then creates significant pain especially with activity and especially upon rising in the morning after rest. Usually the child will notice subjective symptoms in the diffuse area around the heel. He can occur on one side only or both.



Growth Plate Injury



MANAGEMENT AND TREATMENT of this problem includes reduction of activity and rest. We usually recommend a removable pneumatic cast boot over the next 4 weeks. Stretching of the tight calf musculature helps to reduce the pressure of the Achilles tendon on the growth plate and if tight we will sometimes recommend a night splint along with manual stretching exercises. Thirdly we recommend an orthotic to help reduce the plantar fascia tension on the growth plate through pronation. This is done either with a custom or an over-the-counter type insert. Occasionally anti-inflammatory medication as necessary or complete discontinuation of all sporting activities. The problem is self-limited as eventually the growth plate will fuse but we see many patients that have recurrence calcaneal apophysitis at the beginning of each soccer season. This is from incomplete healing and likely a return back to sports too quickly.

CALF MUSCLE STRETCH: manual stretch or night splint



CAST BOOT IMMOBILIZATION:



ORTHOTICS

