Calcaneal Apophysitis

What is it?



We can often learn a good deal about a particular medical condition if we understand the terminology used in its description. The term, calcaneal, refers to the heel bone while apophysitis describes an inflammation of the heel's growth plate in a child. A

calcaneal apophysitis is a condition usual/y seen in young athletic or physically active children of the age group 8-15. The heel is painful with running or jumping, is usually not swollen visually or discolored, and seems to get progressively worse without treatment. A parent will often bring in a child because of limping during game play along with complaints by the child of discomfort in and around the heel especially after exercise.

What causes it?

Most authorities seem to agree that this condition results from acute or repetitive trauma to the heel at a time of vulnerability due to natural growth periods. The growth plate is not solid bone but made of a softer substance. The Achilles tendon attached to it and any increase in activity can cause the softer area to move causing pain. It should be noted that the heel area of the foot is under normal circumstances, not highly vascularized or well supplied by blood circulation. This means that the area of the foot will heal slower and might be subject to increased risk of injury. Acute trauma refers to a sudden, impact or blow to the involved site while repetitive trauma involves cumulative stress over an extended period of time. The bottom line is similar however, with trauma to the growth plate area of the heel being the culprit.

How do you treat it?

The management of a calcaneal apophysitis condition involves protection and support of the heel in order to allow for normal

developmental growth. This can be accomplished by wearing protective cups, controlling heel motion and impact <u>with an orthotic</u> and in some cases to even further reduce weight bearing by casting and/or crutches. The continuance of athletic competition during treatment is an issue that is largely dependent upon how the child responds to therapy initially. In most cases, where the symptoms reduce early on with treatment, the child might continue with physical activity. On the other hand, if the symptoms persist well into the therapy period, then reducing or eliminating continued physical activity might be necessary. This condition in most cases can be readily managed once identified and properly treated. As the growth plate attaches to the bone the condition becomes self limiting.