Heel Pain in the Growing Athlete (Sever's Disease)

Sever's disease or calcaneal apophysitis, is the most common cause of heel pain in the growing athlete and is due to overuse and repetitive microtrauma of growth plates of the calcaneus bone in the heel. It occurs in children ages 7 to 15, with the majority of patients presenting between 10 and 12 years of age



Picture 1 Inside the heel

Symptoms include complaints of pain or tenderness in the heel(s), discomfort when heel is squeezed, limping, and more severe pain after walking, running or playing sports.

Sever's disease is directly related to **overuse of the bone and tendons in the heel**. This can come from playing sports or anything that involves lots of heel movements and hard shoes such as cleats. It can be associated with starting a new sport, or the start of a new season. It occurs more commonly in children who **pronate** (feet roll inward), and involves both heels in more than half of patients.

Treatment:

- 1. Ice the heel(s) well after exercise (until the area is cold and numb!)
- 2. Stretch hamstring and calf muscles 2-3 times daily (exercises below)
- **3.** REST when pain becomes persistent or moderate (even if it means skipping games or practices.)
- 4. Anti-inflammatory medication such as ibuprofen.

If symptoms persist, your child may need to see a physical therapist for additional exercises, and/or an orthopedist for othotics or temporary casting/crutches if pain is severe.

Sever's disease is **self-recovering**, meaning that it will go away on its own when the heels are rested or when the bone is through growing. The condition is not expected to create any long-term disability, and expected to subside in 2–8 weeks. However, pain can recur, for example at the start of a new sports season, several times if it is not taken care of.

Prevention consists of maintaining good flexibility through stretching exercises, avoid excessive running on hard surfaces, and use quality, well-fitting <u>shoes</u> with firm support and a shock-absorbent sole.

Exercises:

- See this excellent article by Nationwide Children's Hospital that shows stretching exercises that will both treat and prevent Sever's from recurring:
 - <u>https://www.nationwidechildrens.org/conditions/severs-disease</u>
 - Stretching will help loosen a tight Achilles tendon and take pressure off the growth plate.
 - Stretch the calf muscles and Achilles tendon 3 times a day: in the morning when your child wakes up, after lunch or school, and before bed.
 - Hold each stretch for 30 seconds. Repeat 10 times.
 - Have your child continue doing these stretches even after their pain goes away. Stretching can prevent Sever's disease from coming back.