

CALCANEAL APOPHYSITIS (Severs disease)

(Named after JW Sever MD, 1912)

(Sever JW: Apophysitis of the Os Calcis. New York Medical Journal 1912; 95: 1025-1029.)



From an article written by Dennis Rehbock for SA Pharmaceutical Journal.

Severs disease is an inflammation of the heel growth plate that is commonly seen in children. Severs disease is pain in the heel bone (calcaneus) caused by a disturbance of the growth area (growth plate) at the back of the heel where the strong Achilles tendon attaches to it. This is known as Severs disease or calcaneal apophysitis. It is seen most common in boys between the ages of 9 to 12 years of age. These are one of several different 'osteochondroses' that can occur in other parts of the body, such as Osgood-Schlatters Disease at the knee joint.

The cause of Severs disease is not entirely clear.

It is most likely due to overuse or repeated minor trauma that happens in a lot of sporting activities such as football and running activities. This trauma affects the cartilage join between the two parts of the growing bone in the heel and results in inflammation and pain.

Hard playing surfaces, like those hard football fields in South Africa in winter, increases the risk of this Severs disease.

Children who are heavier are also at greater risk for developing Severs disease.

Tight calf muscles and a pronated foot (flat foot) can also predispose the child to Severs disease.

Care must be taken not to diagnose this condition from x-rays. The appearance of Severs disease on is impossible to differentiate from a normal developing heel bone on x-ray.

Signs and symptoms.

Pain is usually felt at the back and side of the heel bone (body of the heel) and sometimes under the heel as well. The pain is usually relieved when the child is not active and becomes painful with sport. Squeezing the sides of the heel bone is often painful.

Running and jumping make the symptoms worse and rest or inactivity will relieve it.

One or both heels can be affected.

In more severe cases, the child may be limping or walking on their toes. This toe walking can cause Achilles tendon strain and pain in the forefoot.

Self management.

Rest from sporting activity. If the pain is mild then just cutting back may be necessary, but if the pain is severe that complete rest is needed. The child may not like this, but it is necessary. The parent must be in full control of this rest or playing sport process, as the child will often continue playing with the heel pain.

Avoid going barefoot.

A simple heel cushion in the shoes will help. This has the effect of lifting / raising the heels as well.

Calf muscle stretches should be done daily. These are a bit like eye exercises that should be done daily but generally do not get done. Parental help and encouragement is necessary.

Ice the area for 10 minutes, two to three times a day.

Treatment.

Podiatric treatment is often wise as a correct diagnosis is extremely important.

Time should be taken to educate the patient and parents about the condition. They should be reassured that the condition is self limiting and will go away as the heel bone growth plate fuses.

Care must also be taken in your dealings with the patient and parents that the name Severs disease does not conjure up a dreaded disease, which it is not. Severs disease is unfortunately a dramatic name for a temporary condition. Perhaps we should rather call it Severs Syndrome? Or Calcaneal apophysitis.

Advice should be given on all of what is mentioned above - appropriate activity levels, the use of ice, always wearing shoes, heel raises and stretching exercises.

If the child's feet are pronated (flat) then innersoles or orthotics (foot supports) can be used to control foot function and cushion and lifting / raising the heels.

Physiotherapy and strapping is useful to reduce the inflammation.

Anti-inflammatory medication can be used with care for inflammation and pain control.

In severe cases a lower limb cast can be used for two to six weeks to enable total non-weight bearing and healing.

After the condition resolves, prevention with the use of stretching, good supportive shock absorbing shoe and soft heel raises are important to prevent it happening again. The activity level should also be monitored to prevent any overuse.

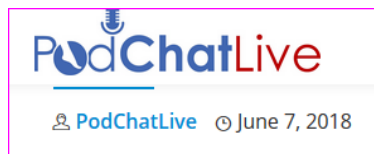
This condition usually resolves spontaneously and there are no known long term complications associated with Severs disease.

References.

From an article written by Dennis Rehbock for SA Pharmaceutical Journal.

New ideas update.

Dr Alicia James PHd Podchatlive – 7.6.2018 – ep 28. Head of podiatry – Peninsula health, Australia.



See the video at <http://podchatlive.com/episode-28-alicia-james-calcaneal-apophysits-severs-disease/>