Orthopaedic fact sheet 7

Sever's Disease

Sever's disease is a common cause of heel pain in children between 8–14 years old and occurs during the rapid growing phase of early puberty. It is more common in boys than girls and it can affect one or both feet. It often affects children who are involved in many athletic activities, particularly high impact activities (e.g. running, jumping)

Tendons attach muscles to bone. During periods of rapid growth, muscles and tendons become tighter as bones become longer. Sever's disease is caused by inflammation where the Achilles tendon attaches the calf muscle (the large muscle at the back of the shin) onto the calcaneus (heel bone) ***(Figure 1)***.

Overuse and tightness of the calf muscle from repeated running and jumping forces leads to micro trauma and inflammation at this point. The inflammation and bony changes result in pain and tenderness at the back of the heel, especially if you press at this point or squeeze the sides of the heel. The child may walk on their toes to relieve the pain. The severity of pain varies and is usually worse during or just after activity. It tends to ease with rest.

The diagnosis of Sever's is through a clinical examination. Special tests or X-rays are not necessary.

The treatment of Sever's disease is conservative and is directed at relief of the discomfort and regaining/ maintaining flexibility in the calf muscle. Continuing sport or physical activity does not cause any permanent damage to the foot but it may make the pain worse. It is recommended the child stop or modifies the activities that cause them pain. Symptoms can be treated with shoe modification (e.g. heel pads), ice, anti-inflammatory gel/cream, calf stretches ***(Figure 2)*** and strengthening exercises for the calf muscle.

Sever's disease tends to resolve when the child stops growing. Children with Sever's disease recover with no limitation of activity and no long-term problems.

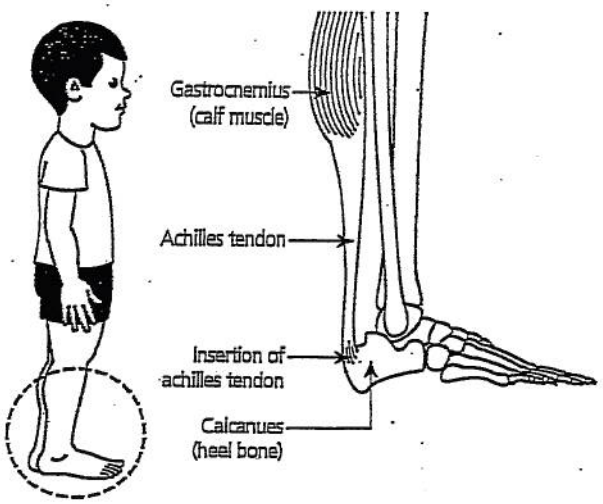

Figure 1. Anatomy of Sever's disease.

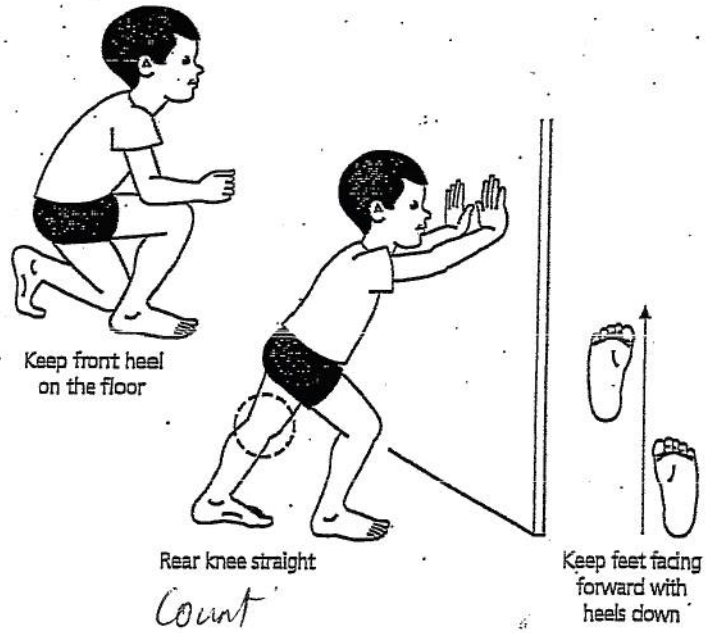

Figure 2. Daily stretches may be of benefit for Sever's disease.

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