



## *Sever' s Disease*

### **What is it?**

Sever' s disease is a condition that affects growing children who exercise. It is caused by traction of the muscle-tendon unit of the calf on the growth plate at the back of the heel (traction apophysitis is the medical name for this phenomenon). The predisposing factors include rapid growth and high levels of physical activity, particularly running and jumping.

### **What are the symptoms?**

Sever' s disease presents as a gradual onset of pain at the heel. The pain is usually worse with running and jumping activities. Direct pressure over the sore area from shoes can worsen the symptoms. The pain improves with rest. It may be associated with a discrete area of swelling at the back of the heel. Sometimes both heels are affected.

### **Who gets it?**

This condition is more common in boys than girls and it tends to affect girls between the ages of 9 and 11 and boys between the ages of 11 and 13. It is more common in children who are very active.

### **How is it diagnosed?**

Management of this condition involves establishing the correct diagnosis. This can usually be made on the basis of the history and findings on physical examination. X-rays are usually not required

### **What is the treatment?**

Limitation of running and jumping activities is required until the symptoms subside but it is often not necessary for the child to totally abstain from sport. An exercise program to improve the flexibility of the calf muscles (at back of lower leg) and hamstrings (at back of thigh) should be instituted.



### **Treatment (cont.)**

This will reduce the traction of the calf muscle and Achilles tendon on the involved growth plate at the back of the heel. A half inch heel raise in both shoes will also reduce the traction. Ice can be applied to the affected area for 20 minutes after activity or after a day of walking at school. This may help relieve swelling and pain. In some cases biomechanical factors may be contributing to this condition (ie. flat feet). If this is the case, and the symptoms are slow to resolve with the above measures, it may be necessary to get custom-made orthotics to correct this.

### **What is the prognosis?**

Sever's disease is a self-limiting condition that leaves no residual disability. It can however necessitate a reduction in running and jumping activities for 1-2 seasons until growth rates have slowed.

## SEVER'S DISEASE

### Management Plan

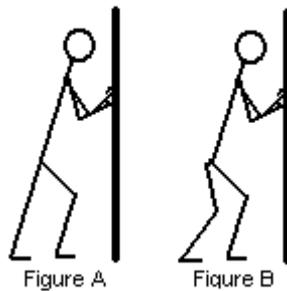
1. Limit running and jumping activities

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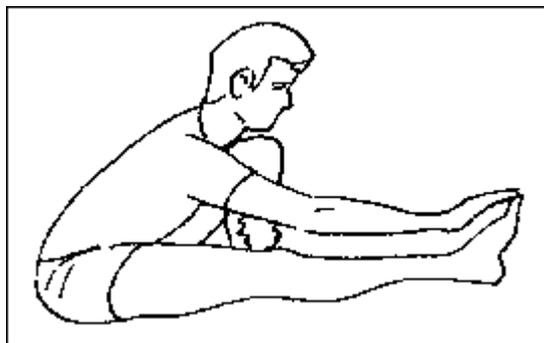
2. Ice heel for 20 minutes after activity

3. Heel raise for shoes

4. Calf stretches: -----



5. Hamstring stretches: -----



6. Other

- a. Orthotics
- b. Calf strength program

7. Follow up in: -----