

### **Haglunds – The bump on the heel**

Haglund's deformity is a bony enlargement on the back of the calcaneus (heel bone). This enlargement is near where the Achilles tendon inserts on to the back of the heel, which can often lead to irritation of the tendon, especially while wearing certain styles of footwear. There is also a retrocalcaneal bursa (a fluid filled sac between tendon and bone) present in this area of insertion between the Achilles tendon and heel bone, which can often become inflamed in this condition. When a bursa becomes inflamed the condition is referred to as bursitis. The pain associated with Haglund's is commonly due to this bursitis.

### **Causes & Symptoms:**

The bone development seen in Haglund's deformity develops from a persistent irritation to the heel area. This irritation typically comes from footwear such as pumps for women, dress shoes for men, tactical boots, or skates.

There is a heredity component involved with Haglund's deformity. People can inherit a type of foot structure that predisposes them to this condition. Pes cavus, or high arches, causes the uppermost portion of the back of the heel bone to rub against the Achilles tendon, which in combination with certain styles of footwear can lead to the formation of the bony protrusion seen in Haglund's deformity. Once this protrusion has formed, the bursa in the area tends to become inflamed leading to painful bursitis.

Tightness in the Achilles tendon can also play a role in Haglund's deformity. Once the condition involves bursitis, a tight Achilles tendon causes pain by compressing the inflamed bursa.

### **Treatment:**

Pedorthic treatment for Haglund's deformity includes

- custom foot orthotics
- heel lifts
- shoe modifications and a stretching program.

Patients with a high arch may have poor foot mechanics that can aggravate the symptoms seen in this condition. Custom foot orthotics can help control the motion of the foot to help take pressure away from the Achilles tendon insertion at the heel.

Heel lifts can be added to custom foot orthotics or placed separately in footwear to slightly raise the heel to help relieve some tension in a tight Achilles tendon. This should be accompanied with a stretching program for the calf musculature to help lengthen the tendon.

Footwear that are backless or have a soft back would help limit irritation to the area associated with this condition. Accommodation pads can also be added to the interior portion of the back inside footwear to help create a pocket for any bony growth at the heel. These pads are intended to reduce any rubbing between the bony growth and interior portion of the shoe.

