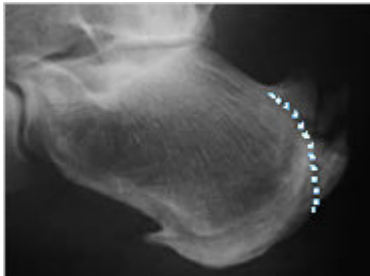


INSERTIONAL ACHILLES TENDONITIS

The Achilles tendon attaches to the heel bone (the calcaneus) over a very broad area. Although the tendon is only approximately one-centimeter thick, its attachment spreads over a three and a half-centimeter area on the calcaneus. Recurrent stress on the tendon where it attaches (the insertion) leads to inflammation, microscopic tearing of the tendon, swelling and pain. This can be associated with inflammation of the space between the tendon and the calcaneus, called the retrocalcaneal bursa. At times the back of the heel can begin to enlarge and get quite thick. The thickening is partly as a result of bone spurs that may develop on the back of the calcaneus. These can then grow up into the substance of the Achilles tendon causing further wear and tear of the tendon.



This is the typical appearance of a painful heel from a bump on the back of the heel bone. This is aggravated by rubbing from shoes (in some countries this condition is called a pump bump because of the "pump" type of shoe).



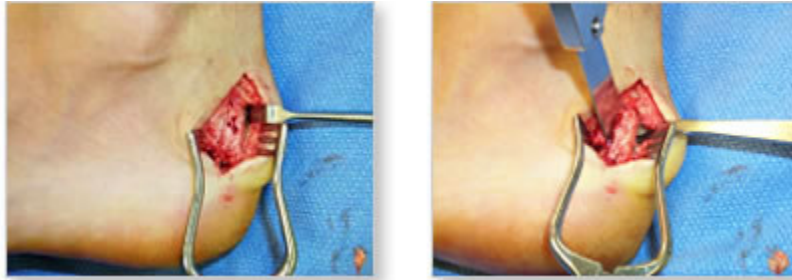
This is the appearance of the back of the heel on an XR taken from the side view. The abnormal bone projecting into the Achilles is easy to see, and the normal heel bone contour is shown with the dotted line.

Treatment

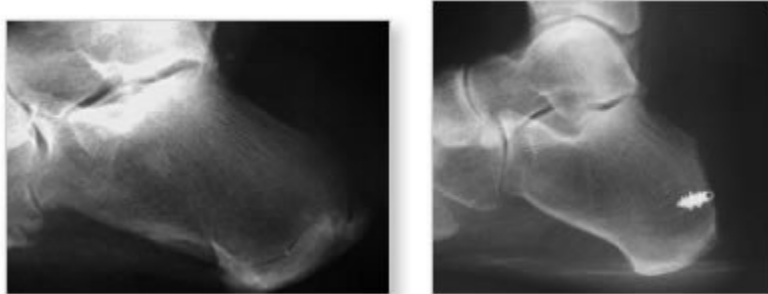
Treatment of the insertion of Achilles tendonitis begins with rest, elevation of the heel on the sole of the shoe and physical therapy treatments. All of these are designed to decrease the inflammation on the tendon. Inflammation occurs with every step we take when walking because of the stretching of the Achilles tendon. Padding of the shoe, elevated heels and physical therapy treatments are commonly successful. Cortisone (steroid injection) should not be used to treat inflammation of the insertion of the Achilles tendon since this can lead to further deterioration of the tendon itself. the leg in a walking boot to rest the Achilles. If pain and weakness continue after prolonged boot treatment, then surgery is necessary to repair and reconstruct the degenerated Achilles tendon.

Surgical Management

If conservative treatments are not sufficient, surgery is performed. The surgical procedures performed are varied and are determined by the underlying problem. For example, if the bone on the back of the heel is very prominent and is digging into the Achilles tendon, the bone is trimmed and shaved.



Here you see the back of the heel and the bump on the heel bone shown on the left. Right: A bone chisel is used to remove the bump completely.



The bone on the back of the heel has been removed. On the X-ray on the right, note a white object in the bone. This is a small bone screw that is used at times to re-attach the Achilles in severe cases where a lot of bone has to be removed.

Post-operative Recovery

- Half cast on Crutches for 2 Weeks
- Below Knee Fiberglass Cast for 4 Weeks
- Walking Cast for 4 Weeks
- Physiotherapy
- Resume Activities in 12 Weeks

Possible Complications

- Infection
- Wound Healing Problems
- Tendon Rupture
- Prolonged Pain & Swelling