Insertional Achilles Tendinitis

This is a degeneration of the fibers of the Achilles tendon directly at its insertion into the heel bone. It may be associated with inflammation of a (retrocalcaneal) bursa or tendon sheath in the same area.

What are the symptoms?
Most patients report the gradual onset of pain and swelling at the Achilles tendon insertion into the back of the heel bone without specific injury. At first, the pain is noted after activity alone, but becomes more constant over time. The pain is made worse by jumping or running and especially with sports requiring short bursts of these activities. There is tenderness directly over the back of the heel bone and often there is a bone prominence at this area. Positioning the ankle above a 90 degree position is limited by pain.

What causes insertional Achilles tendinitis?
The cause is primarily a degeneration of the tendon. The average patient is in their 40s. Conditions associated with increased risk include psoriasis and Reiter’s syndrome, spondyloarthropathy, gout, familial hyperlipidemia, sarcoidosis and diffuse idiopathic skeletal hyperostosis as well as the use of medications such as steroids and fluoroquinolone antibiotics.

What are treatment options?

Non-Surgical Treatment Options
Conservative non-surgical treatment remains effective in the majority of patients with liberal use of nonsteroidal anti-inflammatory drugs, heel lifts, stretching and shoes that do not provide pressure over this area. If symptoms persist, then night splints, arch supports and physical therapy may be of benefit. If this fails, then application of a cast or brace with gradual return to activity is indicated. Nitroglycerin patches may also be of benefit in an attempt to increase the blood supply to this area.

Surgical Treatment Options
Surgical treatment is indicated if there is failure of several months of nonsurgical treatment. Surgery removes the degenerative portions of the tendon, any bone which is irritating the tendon, and any inflamed bursa tissue. If the tendon is short, then lengthening may also be necessary. The tendon attachment to the heel bone may need to be strengthened with sutures that attach directly into the bone.
Several different approaches and techniques, including endoscopy, are used to achieve these goals. There is no clear consensus regarding which is best in terms of both success and complications. In older patients or those in whom more than 50 percent of the tendon is removed, one of the other tendons at the back of the ankle is usually transferred to the heel bone to assist the Achilles tendon with strength as well as provide a better blood supply to this area.

How long is recovery after surgery?
After surgery, a splint is worn for two weeks in a toe-down position to allow wound healing. Once the wound begins to heal, weightbearing in a cast or brace in a toe-down position as well as range-of-motion exercises are started. Actual physical therapy is started at four to six weeks. Return to athletic activities usually occurs between eight to 12 weeks, depending on the amount of detachment of the tendon at the time of surgery. If another tendon is transferred, then recovery may take longer.
Some patients may require one to two years to recover following both surgical and non-surgical treatment. Good to excellent results after surgery are about 75 percent.

Potential Complications
Because of the poor blood supply to the skin and tendon in this area, the greatest risk following surgery is that of wound complications, infection and tendon detachment.