

# ACHILLES TENDON REPAIR

## Post-operative Recovery Protocol

<b>Type of Procedure:</b>	Outpatient
<b>Length of Procedure:</b>	45-60 minutes
<b>Anesthesia:</b>	Local with sedation (twilight) and nerve block

### Rupture Of The Achilles Tendon: What Is It?

Rupture of tearing of the Achilles tendon is a common condition. This typically occurs in an individual who sustains the rupture while playing sports, or perhaps from tripping.

There is a vigorous contraction of the muscle and the tendon tears. The patient will often describe the sensation that someone or something has hit the back of the calf muscle. Pain is suddenly present, and although it is possible to walk, it is painful and the leg is weak.

While it is possible to treat this ruptured tendon without surgery, surgery tends to lead to lower rates of re-rupture and higher strength.

The surgery is performed in order to regain the maximum strength of the Achilles, as well as the normal pushing off strength of the foot. The strength of the muscle depends on establishing the exact correct tension between the muscle and the tendon, and the only way that this can be set is by accurately repairing the tendon ends.

Following the tendon repair no walking on the foot is permitted, but only for ten days, then walking is begun in a removable boot. The design of this boot is important, and the movement in the boot will be controlled before the surgery. There were some treatments used many years ago which relied upon a cast applied to the leg, leading to tremendous weakness and atrophy of muscle, which was often permanent.

Approximately fifteen years ago, with a new treatment, the recovery after surgery for repairing the Achilles tendon changed dramatically, leading to maximum restoration of tendon healing and rapid return of strength.

Instead of a cast, a removable boot is worn, and instead of using crutches, walking is commenced very rapidly after surgery. This treatment has made a huge difference in the recovery process, and therapy and exercises are begun soon after surgery.

### General Recovery Facts

The goal of surgery is to return you to full healing and strength of the tendon in as short a time as possible. You will need to use crutches for 10 days after surgery, and then as soon as the stitches are removed, you will begin walking in a removable boot. Walking and exercise are very important after the surgery and a careful physical therapy program which I have developed will be necessary.

### Specific Post-operative recovery

#### Week 0-2 post surgery

Maintain in the splint resting Equinus(foot pointing down). Elevate the foot as much as possible to limit swelling and wound complications.

### Week 2-4 post surgery:

Placed into a removable boot with some form of heel raise, about 6 cm. Continue with this for two weeks, then reduce the raise to 4 cm for another two weeks. Then the raise should be removed altogether and the boot continued for another two weeks after that. ( 6 weeks total)

### Week 4-6 post surgery:

Begin physiotherapy, concentrating on improving some range of motion, limit dorsiflexion to -20° Equinus though. No forceful assistant dorsiflexion. Concentrate on getting the repaired tendon to glide in the tendon sheath.

### Week 6-8 post surgery:

Begin returning the ankle to neutral. Some very light resisted plantar flexion at first, increasing strength through this period. Do not force dorsiflexion yet.

### Week 8- and on:

Continued to strengthen calf muscles. Aim for a single leg heel raise at about **4** months post surgery.

No impact activities such as sprinting, tennis, squash etc for at least four months. The moon boot is necessary for at least two months post surgery. It is necessary to **sleep** in the boot for the first four weeks once the splint has been removed.

Weight-bearing is to be encouraged, it strengthens the repair and reduces the degree of atrophy. This must be controlled in the boot for eight weeks with decreasing heights of heel raises. Swelling is usual for at least four months.

Complications are uncommon but can include: infection of the skin and the repair, Deep vein thrombosis, nerve injury, re rupture and adhesions of the tendon. With good post op care and rehabilitation, these can be reduced.

