

I have had the pleasure over the last several years at **Citadel Physiotherapy in Halifax** to work closely with Dr. Mark Glazebrook, Orthopedic Surgeon (Foot and Ankle specialty) and see many Achilles tendon ruptures who have chosen to not have surgery and follow a non-operative rehabilitation approach. I must admit when this approach was first suggested to me, I was skeptical, as I previously had always treated Achilles Ruptures with surgery.

### **I am happy to say that if I ruptured my Achilles today, I would go the non-operative approach.**

When treating an Achilles Rupture non-operatively the most important thing is good rehabilitation. **Non-operative does NOT mean no rehab.** In fact, it is even more important than ever to have good rehabilitation from a [physiotherapist](#) with experience treating Achilles Ruptures non-operatively and familiar with the do's and don'ts of the protocol. Patient education and believing in the plan/protocol is essential. This is not a protocol that can be tweaked to suit the therapists or your needs. Tweaking with the protocol, can lead to poor outcomes or even re-ruptures.

With the non-operative approach, it is important for to be casted, non-weight bearing for the first two weeks. The foot is pointed downward in the cast. Once the cast is removed, around the 2-week mark, transition into the Breg Achilles Bootwalker occurs. This is a specially designed Bootwalker that has heels in it that essentially holds the foot with the toes pointed down. You are then allowed to gradually start putting weight through the injured side while in the boot for the next 4 weeks. The boot remains on while sleeping and is only removed to do range of motion exercises, washing, and rehabilitation. This Breg Achilles Bootwalker is available at Arthritis & Injury Care Centre locations.

Physiotherapy can start once the cast is removed and you are in the Achilles Specific Breg Bootwalker. Rehabilitation should start with an experienced physiotherapist who will initiate modalities to help promote healing of the tendon and decrease swelling. Education by the physiotherapist on active range of motion exercises below neutral and weight bearing is essential. An experienced physiotherapist will also be able to educate you on other activities that you may want to do to stay in shape at the gym that will not stress your injury.

At the 6 week mark, the heel lifts are gradually removed from the Breg Achilles Bootwalker. Depending on the design of the boot, 1-2 heel lifts maybe left in to ensure that the you are not overstretching the tendon. You are usually 100% weight bearing at this time and continuing with rehabilitation and physiotherapy

### **One of the most important things to ensure a successful outcome is to not lengthen the tendon during the rehab.**

Once the Breg Achilles Bootwalker is removed at the 8-week mark, one needs to be extremely careful to let the tendon stretch out naturally. Overstretching the tendon at this phase will lead to a long tendon that is weak and very difficult to strengthen. Long tendons are extremely hard to strengthen, are more susceptible to re-ruptures and lead to poor perceived outcomes. This is

where an experienced physiotherapist can guide you through the introduction of proper exercises and how to prevent lengthening while returning to normal activities.

Gradual removal of the boot walker begins at 8 weeks and you can stop sleeping with the boot walker at this time. It is important to wear traditional sneakers with a good heel wedge during this stage and to avoid walking around the house barefooted. Stairs should also be taken one at a time initially till range of motion is restored.

Rehabilitation and physiotherapy continues with the initiation of cardio and strengthening exercises. Again, care is taken not to overstretch the tendon with activities such as squats and lunges. Return of strength is gradual and you are usually not able to do a single heel raise on the affected side until almost 4 months post injury.

Although this is only a brief synopsis of the rehabilitation and physiotherapy plan, I have seen great successes with non-operative treatment of Achilles patient ruptures without the complications of surgery. The most important thing is to have good rehabilitation from a therapist experienced with the protocol.

**The Physiotherapists at Citadel Physiotherapy in Halifax and Dartmouth are very experienced in treating Achilles Ruptures Non-operatively.**

Daniela Rubinger  
BScPT, Registered Physiotherapist  
Citadel Physiotherapy