

## Achilles and Plantar Fascia Rehabilitation Post-Regenerative Medicine Treatment

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- First Days Post Treatment
  - **Maintain non-weight bearing status to the treated ankle/leg through use of axillary crutches for the prescribed number of days**, which depends on the specific treatment as well as the type and severity of the ankle injury. (Typically, 2 days minimum to as long as 2 weeks). Depending on the severity of injury/specific treatment rendered, you may be advised to initially transition from crutches to a walking boot. If you are going to be in the boot for longer than 2-3 days after discontinuing crutches, it is advised that you obtain an EVENUP (available on Amazon) for the other foot so as not to throw off your pelvic alignment.
  - It is very important during this time not to use or load the foot/ankle/leg. This includes transitioning from a seated to standing position, such as getting up/off the toilet. The concept here is that the regenerative treatment (PRP, Lipogems, etc.) was precisely placed into the tear or injury site and loading the foot/ankle/leg during this critical phase may displace the treatment. When muscles or tendons are loaded, they squeeze tightly together: picture wringing out a wet dishcloth (which we want to avoid during this phase).
  - If you are placed in a walking boot after transitioning off crutches, you may remove it for bathing/hygiene, but afterwards it should be replaced and worn for the prescribed number of days. Your physician will specify whether you need to sleep in the boot or not. You may gently dorsiflex, plantarflex, invert, and evert your ankle as needed for comfort and to prevent stiffness.
- Once off crutches/out of the walking boot; for the next 2 to 3 weeks
  - “Write the Alphabet with your foot”
    - From a seated or lying position, *write the alphabet* with your foot against air by pointing your toes to spell the letters of the alphabet. Do this 4 to 6 times a day.
  - Gently stretch the ankle
    - From a standing position, place your hands against a wall and step forward with one foot. With both feet planted firmly on the floor, allow the back (injured) leg knee to bend a bit so that you feel a slight stretch in the Achilles. Hold this position for 15-20 seconds, then straighten the back leg knee so you feel the same gentle stretch higher up in the calf. Again, hold the position for 15-20 seconds. Repeat this 2-3 times per side and perform this sequence 3-4 times a day.
  - Initiate walking
    - You may begin slowly and progressively increasing the amount you walk for completing everyday activities. Specifically going on any extended walks for exercise, however, is advised against at this time juncture.

- Start formal Achilles/Plantar Fascia Physical Therapy (PT)
- You will start formal PT at two to three weeks post-procedure. The initial goals will be to restore full range of motion followed by learning how to activate and strengthen the intrinsic foot muscles (these are the muscles located within the foot that do not cross your ankle joint and are often under-developed). PT will progress to negative eccentric strengthening of the Achilles tendon/calf muscles/plantar fascia. Your physician and physical therapist will specify whether you perform **negative eccentric calf lowers** on a step. Core strength and proximal lower extremity stability is vital to improved function throughout the entire lower extremity kinetic chain and will thus be addressed through PT. While you may only attend PT 1-2 days per week, your prescribed exercises should be completed a total of 4-5 days per week. Some brief (10 minutes or less) period of heat or ice therapy will not hurt the therapy, but it is not required. Avoid modalities such as any form of laser or electrical stimulation. Dry needling is fine if needed.
- During this time, avoid aggravating activities. Exercise is vital to good health and finding a way to cross train around your injury is important not only for your physical health, but for your mental health as well. Ask me about cross training options for your injury. In general, I recommend against higher impact cardiovascular exercise (running, jumping, prolonged walking) in the beginning, instead focusing on swimming, elliptical, and stationary cycling (in the seated position).