

Achilles Repair

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Post - Operative Timeline	Precautions	Weight Bearing Orders	Footwear	Rehabilitation Recommendations
				Please see Criteria for Progression to guide functional goals for each stage of rehab (separate document).
0 -2 Weeks	No dorsiflexion beyond neutral x 6 weeks	Non Weight Bearing	In Splint	
2– 6 weeks ROM/ Muscle Initiation	No dorsiflexion beyond neutral x 6 weeks	Progress to full weight bearing x 2 weeks w/ progression given by Dr. Jamieson	Boot with heel lifts placed in boot. Remove one heel lift per week.	- Swelling Modalities - Restore Active ROM - Ok to begin Resisted Strengthening with therabands - Can strengthen within limits of weight bearing orders - Intrinsic Strengthening - Gait Training - Pool Program- deep water program - Bike – start no resistance
6 – 12 weeks Endurance	Carefully progress <u>functional</u> dorsiflexion, this typically improves to normal slowly by about 12 weeks post op.	Progress out of boot and into shoes over 2 week progression given by Dr. Jamieson	Supportive boot or high top shoe transitioning to supportive athletic shoe.	- Restore Functional Dorsiflexion - Gait Training - Resisted strengthening – pilates reformer, shuttle, leg press - Pool Program – can gait train and begin closed chain strength in shallow end - Begin Closed Chain Strength Progression – squats, heel raises, dead lifts, etc - Begin Balance Progression
3 – 6 months Strength	Full ROM	No restrictions	Supportive shoe	- Pool program – cardio, can perform future exercises in pool first - Continue Closed chain strength program – transition to single leg strength and add weight depending on patient goals - Restore double and single leg heel raise strength - Continue with balance progression on dynamic surfaces, without visual dependence and with UE challenges as able - Build patient’s training plan to resume desired cardiovascular training
6+ Months - 1 year Agility Return to Sport	Full ROM	No restrictions	All desired athletic footwear (running shoes, ski boots, etc)	- Continue to progress strength and balance - Continue adding volume to desired cardiovascular training - Progress Agility and Power training Specific to sport - Initiate Absorption and Landing Strategies

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Pearls for your Physical Therapist

1. Please refer to the Criteria for Progression as a tool to set goals for each phase of rehabilitation. We look to your clinical judgement primarily. That said, we have found these tests incredibly helpful as a way to measure progress (due to the strong reliability and validity of these tests; as well as helpful tool to communicate progress between Dr. Jamieson, the patient and the patient's therapist at follow up visits). We also welcome any other objective information you find relevant.
2. Avoid over stretching the tendon repair. This will result in long term weakness in your calf muscle. It's better for it to be too tight than too loose. Full functional dorsiflexion is not expected until 10-12 weeks after surgery.
3. Major risk of re-rupture occurs from 6 weeks to 4 months after surgery, especially when Achilles is unprotected. Wear boot, brace and heel lifts as prescribed.
4. Compression stockings will be of benefit for 3-6 months after surgery, especially when active during day, at work, and when exercising
5. Avoid creating pain in Achilles tendon. If pain or discomfort occurs with exercise or daily activities, it should not persist over 48 hours. If so, a modification should be made in exercise or daily activities.
6. Weight bearing has been shown in studies to improve strength of healing with no increase in re-rupture rate as long as the patient is protected from any unexpected dorsiflexion forces.
7. Restoring plantarflexion range of motion and adding resisted strengthening is safe once the patient is out of the post op splint. However, ensure that the patient is feeling fatigue in the gastroc/ soleus depending on the exercise, **not** the area of the repaired tendon. Apply this rule to stationary biking as well.
8. Closed kinetic chain strengthening (ie: squats, balance, heel raises) are recommended as early as the patient begins weight bearing out of boot, but should not cause pain and/or swelling; if it does, reduce the amount of load through joint.

Suggestions on How to Monitor Activity Level

9. Consider using a step counter or other similar methods to monitor your steps / distance walked throughout the day. This will help you maximize your activity level throughout the day without increasing swelling.
10. Another way to monitor your activity level is to continue to measure your "knee to wall" measurement" with the weight bearing lunge test. Your PT will measure this for you and teach you how to monitor at home. If you lose range of motion for more than 2-3 days, you may need to reduce your activities.

Week 2-4: 2 Week Crutch Wean

Please use the following schedule to progress your weight bearing over the next 2 weeks.

If you experience any increase in pain, return to the previous weight for 2 days then proceed again as scheduled. If available, use an at home scale to best determine how much weight you are putting down on the extremity.

***Calculate % body weight by multiplying body weight by either (.25, .5, .75)**

Days 1 & 2 - (20 % body weight) pounds of pressure

Day 3 & 4 - (30 % body weight) pounds of pressure

Days 5 & 6 - (40 % body weight) pounds of pressure ****REMOVE ONE HEEL LIFT****

Days 7 & 8 - (50 % body weight) pounds of pressure

Between 50% - 70% you may transition to one crutch opposite the affected side

Days 9 & 10 - (70 % body weight) pounds of pressure

Days 11 & 12 - (80 % body weight) pounds of pressure

Days 13 & 14 (100 % body weight) transition from crutch

****REMOVE SECOND HEEL LIFT****

Week 4-5:

After reaching full weight in boot you remain in protective boot/shoe **for 1 full week.**

Week 5-7:

Please use the following schedule to wean from your boot over the next 2 weeks. When you are out of the boot you should wear a supportive protective shoe (athletic or hiking boots). If you have increasing pain over a 2 day period, slow your progression and wait a few days to advance to next stage.

Boot wean should **only** happen after you are **full weight bearing**, not at the same time.

Days 1-3 – out of boot for 1 hour in the morning and 1 hour in the afternoon

Days 4-7 – out of boot for 2 hours in the morning and 2 hours in the afternoon

Days 8-11 – out of boot for 3 hours in the morning and 3 hours in the afternoon

Days 12-15 – out of boot for 4 hours in the morning and 4 hours in the afternoon

Day 16 – out of boot completely

FULL WEIGHT BEARING WITHOUT A BOOT BY 7 WEEKS.