

Achilles Tendon/Calf Rehabilitation



Follow the protocol below. Plan for 1-2 weeks per step before advancing. Use the Pain scale provided for assistance with progression.

- Do not progress for pain greater than 5 out of 10.

Step 1

- Reduce running volume and load (increase step rate, avoid hills) to avoid exacerbation of symptoms
- May need to temporarily avoid over-ground running and substitute other exercise options (cycling, deep water running)
- Start isometric exercises (hold a heel raise) of the involved tendon: 30–60s holds, 3–5 reps, 1–3 sets; start with lower volume if tendon is highly irritable.
- Ice for pain management

Step 2

- Continue isometric exercises and ice for pain management; Add isometric heel drop hold using step as tolerated
- Add Heavy Load Eccentric Exercise (5 seconds, slow motion from heel raise to heel drop)
 - o Start on flat surface and progress to step to achieve a heel drop as tolerated
 - o 3 x 15 reps with knee straight
 - o 3 x 15 reps with knee bent
 - o 1-2x day
 - o Add 10-20% of your body weight using leg press or loaded barbell as tolerated

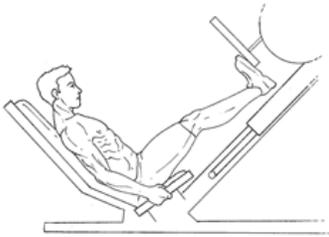
Step 3

- Continue to increase load in both motions (heel raise and heel drop)
 - o Strength: higher load, 3 sets of 8–15 reps, 3–4 d/wk)
 - o Endurance: lower load, 3 sets of 20–30 reps, 5–7 d/wk)

Step 4

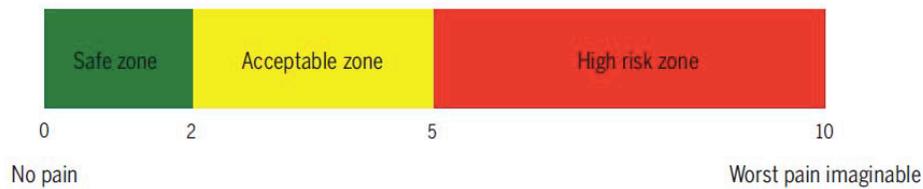
- Improve muscle power: increase speed and range of exercises
- Progress to plyometric training, such as jump squats, skipping, jumping rope, double-leg progressing to single-leg hopping (30–60 reps, 4–6 sets with 60s rest between sets, 2–3 d/wk)

Examples



Pain Monitoring Model

Numerical Pain Rating Scale (NPRS)



1. The pain is allowed to reach 5 on the NPRS during the activity.
2. The pain after completion of the activity is allowed to reach 5 on the NPRS.
3. The pain the morning after the activity should not exceed a 5 on the NPRS.
4. Pain and stiffness is not allowed to increase from week to week.