



## Patellar Tendinopathy Rehabilitation Guidelines

General Rehab Guidelines	<ul style="list-style-type: none"> <li>• Control Pain and Edema</li> <li>• Normal Range of Motion (ROM), proprioception, strength</li> <li>• Return to normal Activities of Daily Living (ADLs)/Sports</li> </ul>
Phase I	<p><b>Goals: Full ROM</b></p> <ul style="list-style-type: none"> <li>• Control Pain</li> <li>• Decrease Edema</li> <li>• Instruction in Home Exercise Program (HEP)</li> </ul> <p><b>Suggested Exercises</b></p> <ul style="list-style-type: none"> <li>• Quad Sets</li> <li>• Straight Leg Raises</li> <li>• Heel Slides</li> <li>• Cross Friction massage for 2 minutes, 1-3 times each day</li> <li>• Hip exercises for flexion, extension, abduction, adduction</li> <li>• Stretches: quadriceps, hamstrings, glutes, abductors, adductors, IT Band, piriformis</li> <li>• Modalities as needed</li> </ul>
Phase II	<p><b>Goals: Increase Strength</b></p> <ul style="list-style-type: none"> <li>• Increase Proprioception</li> <li>• Increase Flexibility</li> <li>• Decrease Pain</li> <li>• Maintain ROM</li> </ul> <p><b>Suggested Exercises</b></p> <ul style="list-style-type: none"> <li>• Eccentric Open/Closed Chain Strengthening:                         <ul style="list-style-type: none"> <li>○ Drop squats, slow-fast, 30 reps / day, x 2 weeks</li> <li>○ Decline squats, double leg or single-leg, on decline board, 30 reps/day, 2x weeks</li> <li>○ Leg press (up with two legs, down with one)</li> <li>○ Terminal Knee extension</li> <li>○ Step up/over/down (affected leg steps up and stays on the step, unaffected leg steps up and over, slowly lower to the ground)</li> <li>○ Wall sits (slide down wall with affected leg, hold, use both legs to return to start)</li> <li>○ Leg extension, (lift, lock, lower), slowly lower weight with affected leg (use light weight to start)</li> </ul> </li> <li>• Hamstring curls</li> <li>• Hip Abductor and Adductor machines</li> <li>• Glute machine</li> <li>• Proprioceptive exercises</li> <li>• Stretches: quadriceps, hamstrings, glutes, abductors, adductors, IT Band, piriformis</li> <li>• Continue with cardiovascular</li> <li>• Continue with modalities as needed</li> </ul>



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Phase III	<p><b>Goals: Return to normal ADLs / sports without pain or limitation</b></p> <ul style="list-style-type: none"> <li>• Maintain flexibility</li> <li>• Independent HEP</li> </ul> <p><b>Suggested Exercises</b></p> <ul style="list-style-type: none"> <li>• Eccentric Open/Closed Chain Strengthening: <ul style="list-style-type: none"> <li>○ Drop squats, on decline board, 30 reps / day, x4 weeks. (Increase resistance once pain is gone by holding dumbbells. Increase weight to produce slight discomfort/pain while performing exercise.) After 6 weeks, patient is to perform Eccentric Drop squat 3x week.</li> <li>○ Decline squats, on decline board, 30 reps / day, x4 weeks. (Increase resistance once pain is gone by holding dumbbells. Increase weight to produce slight discomfort/pain while performing exercise.) After 6 weeks, patient is to perform Eccentric Decline squat 3x week</li> </ul> </li> <li>• Continue to increase strength and flexibility</li> <li>• Sports specific exercises where indicated</li> <li>• Cardio progression where indicated</li> <li>• Independence demonstrated in HEP</li> </ul>
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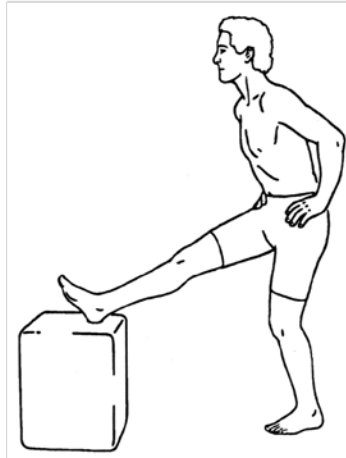
Courtesy of Vanderbilt Sports Medicine



## Patellar Tendinopathy

### Standing Hamstring stretch:

- Place involved leg on stool.
- Slowly lean forward, keeping back straight.
- Lean until stretch is felt in back of thigh.



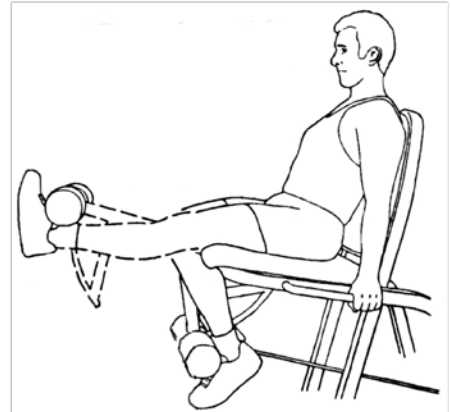
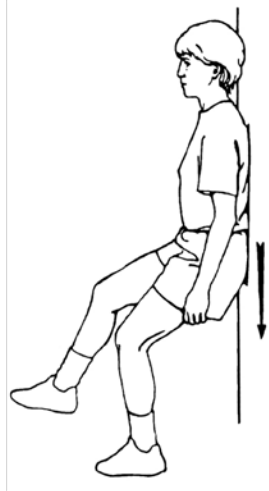
### Standing Quadriceps stretch:

- Use opposite hand to grab involved leg.
- Gently pull heel toward buttocks until stretch is felt in front of thigh.



### Single leg eccentric squat:

- Standing on involved leg with back against wall.
- Slide down wall to about 45 degrees.
- Use uninvolved leg to slide up the wall to return to start position.



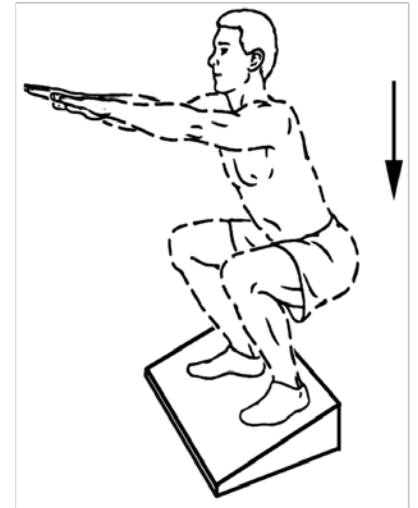
### Lift, Lock, & Lower (eccentric leg extension):

- Use uninvolved leg to lift weight by straightening uninvolved leg to locked knee position.
- Straighten involved leg to locked knee position to meet pad on machine.
- Slowly lower weight with only involved leg.



Drop Squat:

- Stand with feet shoulder width apart.
- Start in standing position, unlock knees rapidly.
- Drop until thighs are almost parallel to the ground.
- Use quadriceps to stop fall.
- Return to standing and repeat.

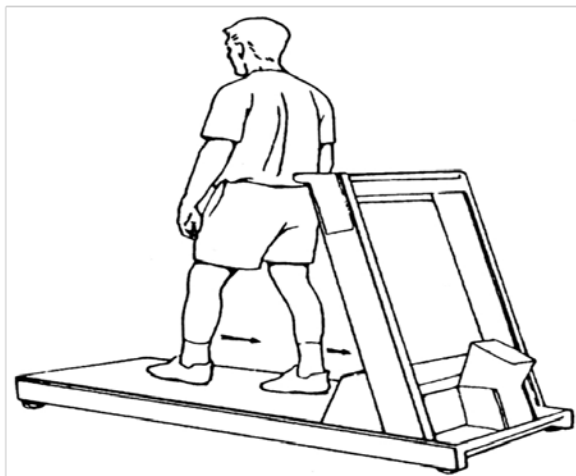


Decline Squat:

- Stand on decline board.
- Unlock knees and squat down. Return to standing.

Step up, over, down:

- Step forward with involved leg onto step.
- Step over with other leg, touching that foot to the ground.
- Bring involved leg down to meet other foot.
- Turn around to face the step and repeat.



Retro (backwards) walking:

- Walk backwards on treadmill
- at \_\_\_\_\_ mph with
- a \_\_\_\_\_ % elevation
- for \_\_\_\_\_ minutes.