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### Patellar Tendinopathy Rehabilitation

#### General Rehab Guidelines • Control Pain and Edema

- Normal Range of Motion (ROM), proprioception, strength
- Return to normal Activities of Daily Living (ADLs)/Sports

#### Phase I Goals: Full ROM

- Control Pain
- Decrease Edema
- Instruction in Home Exercise Program (HEP)

#### **Suggested Exercises**

- Quad Sets
- Straight Leg Raises
- Heel Slides
- Cross Friction massage for 2 minutes, 1-3 times each day
- Hip exercises for flexion, extension, abduction, and adduction
- Stretches: quadriceps, hamstrings, glutes, abductors, adductors, IT Band, piriformis
- Modalities as needed

#### Phase II Goals: Increase Strength

- Increase Proprioception
- Increase Flexibility
- Decrease Pain
- Maintain ROM

#### **Suggested Exercises**

- Eccentric Open/Closed Chain Strengthening:
- o Drop squats, slow-fast, 30 reps / day, x 2 weeks
- o Decline squats, double leg or single-leg, on decline board, 30 reps/day,2x weeks
- o Leg press (up with two legs, down with one)
- o Terminal Knee extension
- o Step up/over/down (affected leg steps up and stays on the step, unaffected leg steps up and over, slowly lower to the ground)
- o Wall sits (slide down wall with affected leg, hold, use both legs to return to start)

o Leg extension, (lift, lock, lower), slowly lower weight with affected leg (use light weight to start)

- · Hamstring curls
- Hip Abductor and Adductor machines
- Glute machine
- Proprioceptive exercises
- Stretches: quadriceps, hamstrings, glutes, abductors, adductors, IT Band, piriformis
- Continue with cardiovascular
- Continue with modalities as needed

#### Phase III Goals: Return to normal ADLs / sports without pain or limitation

- Maintain flexibility
- Independent HEP

#### **Suggested Exercises**

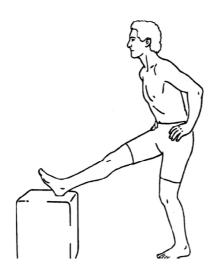
- Eccentric Open/Closed Chain Strengthening:
- o Drop squats, on decline board, 30 reps / day, x4 weeks. (Increase resistance once pain is gone by holding dumbbells. Increase weight to produce slight discomfort/pain while performing exercise.)

  After 6 weeks, patient is to perform Eccentric Drop squat 3x week.
- o 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
- Continue to increase strength and flexibility
- Sports specific exercises where indicated
- Cardio progression where indicated
- Independence demonstrated in HEP

# 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.





- 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.