

Exercises for Quadriceps Strain (0–6 Weeks)

Physical Therapy Simplified: Doctor of Physical Therapy-Approved Home Routine

Designed to reduce pain, rebuild strength, and restore quad control following a quadriceps strain

✓ How Often to Exercise

Start with 1–2 times per day during the early phase. Move slowly and avoid pushing through pain. Mild muscle fatigue is normal, but sharp pain or swelling is not.

◆ 0–3 Weeks: Early Recovery Phase

1. Heel Slides

Purpose: Restore bending while supported Benefits: Improves flexion with low joint stress

How to Do It:

- Lie flat with legs straight
- Slide heel toward your buttocks to bend the knee
- Return to start; repeat 10–15x

2. Short Arc Quad

Purpose: Re-activate the quad in a protected range Benefits: Builds quad strength early in recovery

How to Do It:

- Place a towel roll under your knee
- Straighten your leg by tightening your quad
- Hold 3–5 seconds, lower slowly; repeat 10–15x

3. Long Arc Quad

Purpose: Strengthen the quad through more motion Benefits: Improves control and extension strength

How to Do It:

• Sit with feet dangling or supported

- Slowly extend your knee fully
- Pause briefly, then lower; repeat 10–15x

♦ 4. Straight Leg Raise

Purpose: Strengthen without bending the knee **Benefits:** Builds quad and hip flexor strength

How to Do It:

- Lie flat with one leg bent and the other straight
- Tighten quad and lift straight leg 12–18 inches
- Lower slowly; repeat 10–15x

♦ 5. Sidelying Clams

Purpose: Strengthen hip stabilizers

Benefits: Improves control of knee during movement

How to Do It:

- Lie on your side with knees bent
- Open top knee while keeping feet together
- Slowly return; repeat 10–15x each side

6. Soft Tissue Massage (Tiger Tail Roller)

Purpose: Reduce muscle tightness and soreness **Benefits:** Enhances circulation and healing

How to Do It:

- Sit or lie with leg supported
- Roll gently up and down the quad muscle
- Spend 1–2 minutes on tender areas

◆ 3–6 Weeks: Strength and Control Phase

◆ 7. Bridges with Band

Purpose: Strengthen glutes and hips

Benefits: Promotes better quad and knee support

How to Do It:

- Lie on your back with knees bent, band around thighs
- Lift hips until aligned with knees and shoulders
- Pause, lower slowly; repeat 10–15x

8. Sidesteps with Band

Purpose: Build lateral hip and quad strength

Benefits: Improves knee control during movement

How to Do It:

- Stand with band at ankles, knees slightly bent
- Step sideways 5–10 steps, then return
- Repeat 2–3 rounds

• 9. Step-Ups

Purpose: Strengthen quads through functional motion

Benefits: Prepares for walking and stairs

How to Do It:

- Step onto a low platform with injured leg
- Straighten fully at the top, then lower slowly
- Repeat 10–15x each leg

◆ 10. Lateral Step Overs

Purpose: Train balance and lateral control

Benefits: Improves agility and single-leg coordination

How to Do It:

- Stand beside a small object or cone
- Step sideways over the object and back
- Repeat 10–12x each direction

◆ 11. Single Leg RDL

Purpose: Strengthen hamstrings and glutes

Benefits: Enhances balance and posterior chain strength

How to Do It:

- Stand on one leg, hinge forward at hips
- Reach toward the floor while keeping back flat
- Return to start; repeat 8–10x each leg

◆ 12. Goblet Squats

Purpose: Build full-leg strength

Benefits: Supports quad recovery through controlled load

How to Do It:

• Hold light weight at your chest

• Squat down slowly, keeping knees aligned

• Return to stand; repeat 10–12x



TENS for Pain and Recovery

Use Ice: Apply a cold pack for 15–20 minutes after exercising or when swelling increases. Place a barrier (like a towel) between the ice and skin.

Use TENS: Place electrodes around the quad (not over injury site) for pain relief. Use a comfortable setting that doesn't cause muscle twitching.

Weekly Exercise Tracker

Use this tracker to monitor your consistency. Check the boxes as you go!

Exercise	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Heel Slides							
Short Arc Quad							
Long Arc Quad							
Straight Leg Raise							
Sidelying Clams							
Soft Tissue Massage							
Bridges with Band							
Sidesteps with Band							
Step-Ups							
Lateral Step Overs							
Single Leg RDL							
Goblet Squats							