



Quadricep Strain Injury Instructions



Quadricep strains are injuries to the thigh typically caused by a sudden forceful eccentric contraction. The quadriceps function to decelerate knee flexion and hip extension. There are multiple variables that play into quad strains, including muscle strength, hip posture, muscular tightness, improper form, adverse neural tension, and muscle imbalances. Proper education, treatment, and physical therapy of muscle strains are crucial to the recovery process, return to sports, and prevention of future injuries. Below are the initial steps and instructions in proper care for quad strains. ***Please follow-up with your Certified Athletic Trainer (ATC) for further evaluation and proper care of quadricep strains.***

PHASE I- (24-72 HOURS)

- A. RICE Method- Rest, ice, compression, and elevation
 - a. Rest injury as much as possible
 - b. Ice with knee extended for 20 minutes at least 3x/day
 - c. Compression- wear ace compression wrap
 - d. Elevation- prop leg up above your heart as much as possible and while you apply ice
- B. Non-Steroidal Anti-Inflammatory Drugs (NSAID's) if needed (as directed by a physician)
- C. Avoid applying heat or massaging the area after the initial injury
- D. Gentle and pain-free stretching and range of motion (ROM) exercises listed below.

PERFORM THE FOLLOWING EXERCISES 3X/DAY:

Quad Set Isometrics: 10 x 10sec. hold

Sit with your leg straight on the table or floor. Squeeze your quad muscle and push your knee down towards the floor and hold.



Kneeling Hip Flexor Stretch: 3x30sec. hold

Start in a kneeling position. Slowly push pelvis down and towards front foot while posteriorly tucking pelvis down until stretch is felt in front of the hip.



Heel Slides with Band: 3 x 15reps

Start seated with your leg straight and band around your foot. Use the band to slide your foot towards you so that your knee is bent.



Quadricep Stretch with Band: 3 x 30 sec. hold

Start by lying on your stomach with band around your foot. Gently pull your foot back until you feel a mild stretch and hold.

