

# QUADRICEPS STRAIN

## **What is a quadriceps strain?**

The quadriceps muscles consist of the vastus lateralis, vastus medialis, vastus intermedius, and the rectus femoris. Any of these muscles can strain (tear) but probably the most common is the rectus femoris. If you have a direct impact to the muscle then you should treat it as a Quadriceps Contusion.

Muscle strains are graded 1, 2, or 3 depending on the severity of the damage done. It is important that you understand what damage has been done so that you can treat it correctly.

## **Grade 1**

### **Symptoms include:**

- Tightness in the thigh.
- Unable to walk properly.
- Probably not too much swelling.
- Trying to straightening the knee against resistance probably won't produce much pain.

### **What can the athlete do?**

- Use a compression bandage until you feel no pain.
- Ease down on training for a week or two but no need to stop unless there is pain.
- Apply cold therapy if pain is felt in training.
- See a sports medicine professional.

### **What can a sports medicine professional do?**

- Use sports massage techniques to speed up recovery.
- Use ultrasound and electrical stimulation.
- Prescribe a rehabilitated program.

## **Grade 2**

### **Symptoms include:**

- Probably cannot walk properly.
- Occasional sudden twinges of pain during activity.
- The athlete may notice swelling.
- Pressing on the muscle causes pain.
- Straightening the knee against resistance causes pain.
- Unable to fully bend the knee.

### **What can the athlete do?**

- RICE (Rest, Ice, Compression, and Elevation)
- Use crutches for 3-5 days.
- Wear a compression sleeve.
- See a sports medicine professional who can advise on rehabilitation.

### **What can a sports medicine professional do?**

- Use sports massage techniques to speed up recovery.
- Use ultrasound and electrical stimulation.
- Prescribe a rehabilitation program.

### **Grade 3**

#### **Symptoms include:**

- Unable to walk properly without the aid of crutches.
- In severe pain.
- Bad swelling appearing immediately.
- A static contraction will be painful and might produce a bulge in the muscle.
- Expect to be out of competition for 3-12 weeks.

#### **What can the athlete do?**

- Seek medical attention immediately. It is important that you do this if you suspect a grade 3 strain. If you do not, you may be permanently injured or weakened.

#### **What can a sports medicine professional do?**

- Use sports massage techniques to speed up recovery.
- Use ultrasound and electrical stimulation.
- Prescribe a rehabilitation program and monitor it.
- Operate if needed.

