



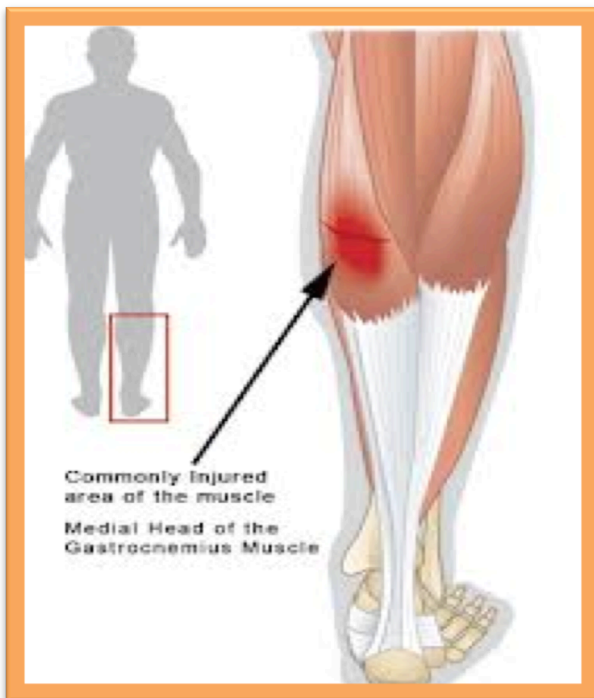
# CALF STRAIN

## INJURY DESCRIPTION:

A sudden pain into the back of the calf or acute soreness following sport is often a calf strain. If the muscle is put under increased tension during contraction either through repetition or high force, the result is tissue failure.

## ANATOMY:

The calf muscle group is predominantly made up of 2 muscles, the gastrocnemius and the soleus which both attach into the heel via the Achilles tendon. The gastrocnemius originates from above the knee and the soleus starts below the knee. The most commonly injured part of the calf is the medial gastrocnemius where it joins into the Achilles tendon.



## MECHANISM OF INJURY:

A calf strain or tear normally occurs during fast acceleration or changing direction activities. Other common mechanisms include jumping, landing stumbling or tripping.

## DIAGNOSIS OF A CALF STRAIN:

A thorough subjective examination will look at the current history of the condition including aggravating and easing factors, mechanism of injury, previous calf injury, training regime and more. Objective diagnosis will often include the following:

## SIGNS AND SYMPTOMS OF A CALF STRAIN:

- Sudden pain into the back of the leg
- Pop or sensation described as 'being hit or stung on the back of the leg'
- Bruising or swelling in the back of the leg which can present in the ankle
- Inability to step onto toes or walk
- Pain with weight bearing, toe pointing, walking up hills and stretching the calf
- Tightness in the calf
- Pain on calf contraction
- Pain on calf stretch;
- Pain on palpation of the affected calf muscle
- Decreased calf muscle strength
- Gait abnormalities including lack of toe-off



The  
Physio  
Movement

## CALF STRAIN

### PHYSIOTHERAPY TREATMENT OPTIONS:

- Cryotherapy
- Dry Needling
- Taping
- Massage techniques
- Strengthening programs
- Dry needling
- Electrotherapy
- Fascial scrapping
- Biomechanical analysis
- Education
- Kinesio taping
- Orthotic assessment



### PHYSIOTHERAPY GOALS

Decrease pain, improve strength and function, improve flexibility and range of motion, retrain gait, return to running, balance retraining and sports specific training including speed, jumping and agility

### PROGNOSIS/TIMELINES:

Calf tears can be graded on a 1-3 scale:

Grade 1: Minor stretching of the muscle fibres, with recovery between 2-4 weeks.

Grade 2: Partial tearing of the muscle fibres , with recovery normally between 4-6 weeks.

Grade 3: Complete tear or rupturing of the muscle fibres, with recovery taking 8-12 weeks.