

## Hamstring Strains

Hamstring injuries are the most common soft-tissue injury to the thigh, and are often seen in runners, especially sprinters, hurdlers and long jumpers. They also occur in sprinting sports such as football, soccer and hockey, especially after an inadequate warm-up.

The classic picture of a hamstring strain is when an athlete is sprinting down the track and stops suddenly, grasping at the back of the thigh. Unfortunately, recurrence of hamstring strains is common and is usually due to inadequate rehabilitation.

### The three most common causes of hamstring strain are:

1. **Sudden, forceful change in muscle length**  
(e.g. when sprinting – bringing the hip forward while straightening the knee puts extremely high loads on the muscle)
2. **Sudden change in pace**  
(e.g. rapid acceleration)
3. **The lower back**  
Either stiffness in the lower back or increased tension in the lower limb nerves can lead to hamstring problems. The lower back-related hamstring injuries make up a large proportion of hamstring problems and always require a thorough assessment to establish the degree of involvement of the lower back.

Management of hamstring strains depends on the severity of the muscle tear (Grades I, II or III) and will involve the use of RICE in the first 24-48 hours. It is also important to have a graduated return to sport that involves the correct blend of strength, endurance, flexibility and sports specific rehabilitation. This detailed program should occur under the guidance of your therapist to evaluate and progress each stage.

Treatment for hamstring strains involves correction of the underlying cause. Most commonly hamstring strains and tears are as a result of poor lumbar (back) mechanics and pelvic instabilities. This can lead to over activity and active trigger points in the back muscles, gluteals and hamstring muscles. A very effective treatment technique that addresses these issues is Trigger Point Dry Needling (TDN). TDN involves the use of a fine filament (acupuncture) needle. Trained Therapists use this needle to deactivate tight muscles that lead to pain and dysfunction.

For further information on TDN please click [‘here’](#). To find a therapist in your area who is specifically trained in these techniques, click [‘here’](#).