

Article Titles:

- 1) *A Comparison of 2 Rehabilitation Programs in the Treatment of Acute Hamstring Strains*
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- 2) *Rehabilitation of Acute Hamstring Strain Injuries*
 - a. Marc Sherry, PT, LAT, CSCS and Bryan Heiderscheid, PT, PhD

Hamstring injuries are one of the most common injuries resulting in loss of time from athletics, especially in sports that require high sprinting speeds such as track, soccer, football and rugby. Research has shown that 1 in 3 hamstring injuries will re-occur when returning to sport and most occur within the first 2 weeks. Research has shown throughout high-speed running, there are times when our hamstrings are more prone to injury. There are many modifiable risk factors that can be addressed and corrected to help reduce the risk of re-occurring hamstring issues. They are; hamstring weakness, hamstring fatigue, reduced flexibility, imbalances in hamstring/quadriceps strength, and decreased core strength and coordination.

Historically there have been two different forms of treatment for hamstring injuries. The first, and more frequently used in the past, has been isolated hamstring stretching and strengthening. More studies have concluded better outcomes with progressive agility and trunk/core stabilization exercises individualized to the athlete. One article concluded that passive stretching and strengthening lead to a 54% re-injury rate compared to a 0% at 2 weeks. After one year 70% of the athletes with isolated stretching/strengthening compared to the 7.7% of the agility and trunk/core stability.

The rehabilitation program that utilized agility and trunk/core stabilization exercises stressed pain-free, low intensity agility exercises, hip muscle activation, and core strengthening to return to sport. The isolated hamstring stretching and strengthening program stressed hamstring stretching and knee curls (using the hamstrings to bend your knee). Another important factor with hamstring rehabilitation is the role the hamstring plays on knee control with explosive movements. If the hamstrings are not strong enough to control dynamic movements, the athlete may be more prone to injuring his or her anterior cruciate ligament (ACL).

As a partner of Eugene Timbers, we want to ensure we are offering as much information as we can in efforts to help the players remain injury free and on the field. If you have any questions or feel like your child/player is in need of help, please contact me at dholte@taipt.com.

