Hamstring strains are frequently seen with many athletes. According to the Journal of Orthopedic and Sports Physical Therapy, February 2010, hamstring strains are a challenge for both athletes and medical professionals because they typically take a very long time to heal. Also, nearly one third of hamstring strains are re-injured within a year and frequently will take twice as long to recover the second time. The greatest risk for re-injury occurs during the first 2 weeks after returning to sport. Therefore, following a hamstring injury, the risk of re-injury can be significantly reduced by utilizing correct rehabilitation strategies and specific tests to determine whether the athlete is ready to return to sport.

Most hamstring injuries occur in one of two different ways. The first is with high speed running. In this incidence, the injury occurs as the leg extends just before striking the ground. The second most common method of injury is typically with dance or a kicking motion. This causes an extreme stretch to the hamstring. This second type of hamstring strain typically requires a much longer recovery period than the first, although the pain and stiffness are typically greater with the running injury.

What should be included in an optimal rehabilitation program for a hamstring strain? The rehab process can be broken down into three specific phases, moving from protection of the injury to gradual strengthening and improved range of motion and then finally to functional activities and agility drills. Researchers have shown that it is best to include eccentric training. This means strengthening the hamstring muscle so that the work occurs more as the knee extends rather than when it bends. The rehab program should also include exercises that work on trunk and hip stability as well as progressing to sport specific drills. Surprisingly, there is no strong evidence that stretching is beneficial either in preventing or in recovery of a hamstring strain. Criteria for return to sport are full pain free range of motion, full pain free strength, and the ability to run, jump and cut without pain. When athletes return to sport before these criteria are met, the chance for re-injury goes up.

How can hamstring injuries be prevented in the first place? Research has shown that incorporation of eccentric hamstring exercises as a part of the normal training program can significantly reduce the incidence of hamstring strain injuries. It is also very important to include stability exercises which target the legs and trunk. Examples would include high knee marching, quick-support running drills, forward-falling running drills, and explosive starts. Also, it has been shown that exercises that emphasize varying trunk movements during running (i.e., upright posture, forward flexed, and forward flexed and rotated) also reduced hamstring injury occurrence.

If you or your child has experienced a hamstring strain, you can improve the recovery process and reduce the risk of re-injury through proper rehabilitation with an experienced physical therapist. Call us today and let us help you get back to your game.