

Hip Flexor Strains: A guide to treatment and recovery

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With a hip flexor injury, as with many musculoskeletal injuries, the healing process is based upon three stages of healing. These stages include the acute inflammatory phase, the intermediate (repair) phase, and the advanced (remodeling) phase. Although it has been two and a half months, your muscle remains in the advanced remodeling phase. This phase typically begins three weeks after injury and can last up to six months. During this period, the scar tissue that was formed during the repair phase undergoes remodeling and becomes stronger. Therefore it is necessary to continue treatment and rehabilitation of the hip flexor. This includes ice post practice, flexibility training, and strengthening of the hip region.

Since the hip flexor plays a large role in the movement of the anterior (front) leg during running, jumping, side to side, and explosive forward movement during sports, it is important to have full strength before returning to play. The atrophy or weakness that occurs during injury will cause other muscles of your leg to compensate. For example, in a case specific to a tennis player, difficulty with side to side movement may be caused by the stress placed on the side and back of your leg which is compensating to take the load for the weakness in the hip flexor. For this reason, it is important to strengthen the entire hip. This includes the front, side, and back of the leg. More specifically, be sure to strengthen the quadriceps, hamstring muscle group, hip abductors (iliotibial band) and hip adductors. Here are some exercises that will help you:

Figure 1a & 1b Straight Leg Raise

This exercise is used to strengthen the hip flexor and quadriceps. It can be done by lying on your back and alternating leg lifts from 0 degrees to 90 degrees while keeping the leg straight or slightly bent. Athletes with a history of lower lumbar pain should bend the uninvolved leg and place the foot flat on the floor.



Figure 1a Straight Leg Raise



Figure 1b Straight Leg Raise



Figure 2 Forward/Backward
Monster Walk

Figure 2 Monster Walk Forward/Backward

In this exercise place a resistance band around both ankles and bend into a squat position. Maintain the squat position while taking small steps forward for a distance of 15ft. Once the end point has been reached repeat the same exercise walking backward to the starting point. This exercise is used to strengthen quadriceps, hamstrings, and hip flexors.

Perform these exercises under the supervision of a qualified healthcare provider. Certain exercises may not be appropriate for every individual, while other exercises may be indicated. All exercises should be performed painfree.

Figure 3a & 3b Monster Walk Side to Side

In this exercise place a resistance band around both ankles and bend into a squat position. From the squat position take small steps side to side maintaining the position for a distance of 15ft. Once reaching that distance repeat the side to side walking back to the starting point.



Figure 3a Side to Side Monster Walk



Figure 3b Side to Side Monster Walk

Figure 4a & 4b Back Squat

This exercise is used to strengthen the quadriceps and hamstrings. The squat is an excellent exercise for the hip when properly executed. Please consult a certified strength coach or fitness instructor for technique instruction before performing this exercise.



Figure 4a Squat



Figure 4b Squat

Perform these exercises under the supervision of a qualified healthcare provider. Certain exercises may not be appropriate for every individual, while other exercises may be indicated. All exercises should be performed painfree.

Figure 5a & 5b Leg Extension

Using a cable cross machine, perform this exercise by strapping one foot/ankle into the machine. Face chest towards the machine and stand tall while extending the leg from resting position to slightly backwards. Be sure to maintain posture and balance during this exercise. It is used to strengthen the hip extensors including the hamstring and gluteus muscles.



Figure 5a Leg Extension



Figure 5b Leg Extension

In order to allow your body to continue healing and prevent further injury, be sure to perform a proper warm-up and cool down each time you play. The warm up should include dynamic stretching exercises such as straight leg marching and carioca. This will help you increase body temperature and allow your muscles to work more efficiently. After you finish playing cool down with light jogging or biking and static stretching. Both the warm-up and cool down should be done for 10-15 minutes.

About the Author

Cori Thompson, MS, ATC, CSCS, PES, is an aspiring doctoral candidate in Exercise Science. Thompson was formerly on the USTA Sport Science staff as a Strength and Conditioning Coach/ Certified Athletic Trainer. Based in Delray Beach, Florida; Thompson works as an athletic trainer for the USTA Women's Professional Circuit while planning to further her post-graduate education.



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