

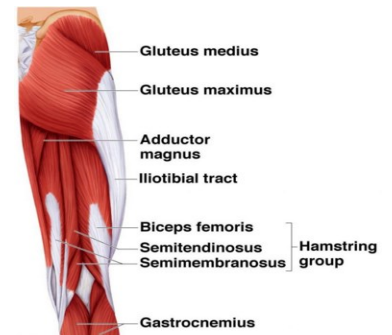
Hamstring Strain



SEATTLE UNITED

Hamstring Anatomy

The hamstring muscle group runs down the back of the thigh and is made up of three muscles, the semitendinosus, semimembranosus and biceps femoris. They start at the bottom of the pelvis at a place called the ischial tuberosity. They cross the knee joint and end in the lower leg. The hamstring muscles help extend the hip and also flex (bend) the knee.



What is a hamstring strain?

A hamstring strain can be pull, partial or complete tear of the muscle fiber. Muscle strains are normally graded according to their severity. A grade 1 strain is mild and heal fairly quickly while a grade 3 strain is a complete tear of the muscle that may take months to heal. Most hamstring injuries occur in the muscle belly, the thick, central part of the muscle. Sometimes, they can occur high up in the muscle, close to where it originates on the ischial tuberosity. These types of strains are called 'proximal strains'.

What causes a hamstring strain?

Muscle overload is the main cause of hamstring strains. This happens when the muscle is stretched beyond its capacity or challenged with a sudden load. Hamstring strains commonly occur when the muscle is eccentrically loaded, extending a muscle while it is weighted. A good example of an eccentric load on the hamstring is during sprinting. When your back leg is straightened and the toes are used to push off and move forward, the hamstring muscles are lengthened and loaded.

There are a couple of risk factors for hamstring strains, including:

- Previous hamstring injury
- Muscle tightness
- Muscle imbalance (one muscle group being stronger than the opposing muscle)
- Poor conditioning (including weak core)
- Muscle fatigue

What do I do if I think I have a hamstring strain?

Some symptoms of a muscle strain are:

- Sudden sharp pain in the back of your thigh during sprinting
- Swelling during the first few hours
- Bruising or discoloration on the back of your leg
- Weakness in your hamstring

If you think you have a strained hamstring, it is important to rest and not overdue any athletic activity. You should ice for 20 minutes every couple of hours, especially if the injury is acute. Try not to stretch your hamstring within the first 48 hours after injury. It is very important to ease back into athletic activity. Do not attempt to sprint unless you can run pain free for at least 20 minutes. You may consider following up with a physician to discuss physical therapy in order to strengthen your hamstring. If you need to see a physician, call 206 598 3294, option 8 to set up an appointment with the UW Sports Medicine Center at Husky Stadium. Mention that you are a Seattle United athlete and they will get you in within 48 hours.

Below are some good hamstring strengthening exercises and stretches. Only do these once you have been cleared by your athletic trainer or physical therapist.

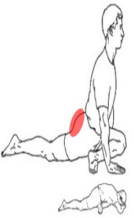
Pyramid stretch: Stand in a split stance with your feet pointing forward, have your feet about 3-4 feet apart, place your hands on your hips and bend forward from the hips, keep your back straight, feel a stretch in your hamstring, hold for 30 seconds, bend your knee and repeat for 30 seconds, switch sides



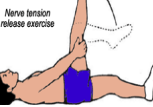
Straddle stretch: Open your feet so they are much wider than your hips, keep your feet parallel and bend forward at the HIPS not lower back until you feel a stretch in your hamstrings. Hold for 15 – 20 seconds. Bend your knees slightly and repeat for 15 – 20 seconds.



Pigeon stretch: Start in a push up position, bring one leg up toward your chest, lay it so your ankle comes close to your opposite hand and the knee is next to the same side hand, you should look like a “7”, bend forward at the hips bringing your chest as close to the ground as you can. Hold 15 – 20 seconds. Switch sides.

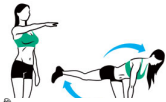


90/90 neural flossing: Lay on your back and bring your leg straight up as high as you can, interlock your arms behind your thigh near your knee, flex your knee to 90 degrees and then extend your leg straight, you should feel a slight stretch in the back of your thigh, repeat about 10x each side



Single leg Romanian deadlift: Standing on one leg, lean forward while kicking your other leg back, maintain a straight line from your trunk to your leg, slowly with control come back to standing. Repeat for 8 times each side.

Fire hydrants: Start on all fours on the ground, make sure your back is flat, engage your core, lift one leg to the side (like a dog peeing on a fire hydrant), keep your hips level, return back down with control. Repeat for 12 times each side.



Plank with toe taps or heel raise: Support yourself on both forearms and your pelvis, legs and upper body are in a straight line, your chest should be lifted with your elbows directly under your shoulders (stay level and don't sag the hips towards the ground). Hold for 30 seconds.



Hip abduction against the wall: Laying on your side with your butt and feet against a wall, make sure your hips don't roll back, lift your leg up in the air to about 45 degrees, hold for a second, come down with control. Repeat about 15 times each side.



Inchworm: Stand with your feet close together, keep your legs straight, stretch down and put your hands on the floor directly in front of you, walk your hands forward slowly, alternating your left and right, bend only at the hip and keep your legs straight, keep going until your body is parallel in a plank position, keeping your hands in place, take short steps forward with your feet, moving only a few inches at a time, continue walking until your feet are by your hands, keeping your legs straight, repeat for about 10 yards

