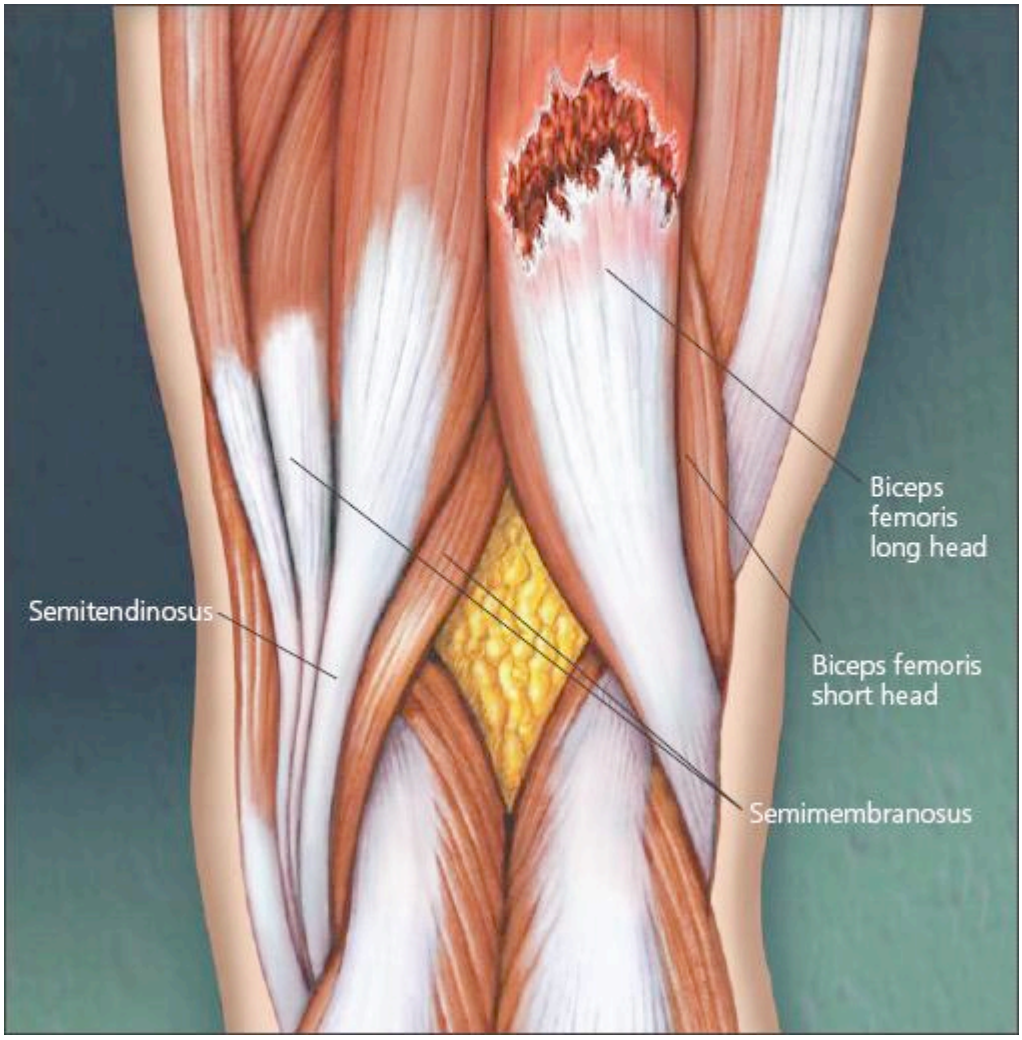
Hamstring Strain



What is the hamstring?

The hamstring is comprised of three muscles: the biceps femoris, semitendinosis, and semimembranosis. The hamstring muscle group is located in the back of the thigh. The hamstring's primary action is to bend ones knee and assist in control of the knee with walking and running.

What Causes a strain?

A hamstring strain is most commonly referred to as a "pulled" muscle. Strains occur when there are abnormal stresses placed upon this muscle group. When the stresses occur at a high enough level the tissue is unable to recoil/recoup from, the tissue is compromised or torn. There are different levels of strains in tissue. Grade one strain is 25% or less of the fibers are compromised, grade two is 50% or less of the tissue, grade three is a complete tear of the tissue. The pain felt from the strain may come from the compromised tissue itself, or the inflammation response after the strain occurs.

Activities that are likely to contribute to a strain are those that require increases in demand, frequency, running speed, or quick change of direction movements. In addition, repetitive stresses through time may contribute to a strain. Finally, the older we get, we have less elasticity in our soft tissue, which makes us more susceptible to a strain.

What are the Symptoms?

Symptoms are described as pain in the hamstring when stresses are place on the comprised tissue, such as being stretched, during contraction (bending the knee), or when direct pressure is placed upon the area. Symptoms vary depending on the level of strain. For grade I to II strains pain symptoms are often described as dull, and diffuse pain with light activity such as walking, or with pressure such as sitting. With more strenuous activity such as running, weight lifting or stretch the pain symptoms are described as sharp and local. With severe strains, grade three, walking may be difficult to execute, pain symptoms may be sharp and constant in nature in the part of the hamstring compromised, there may be some bruising and significant swelling around the area.

Treatment

Treatment options should start by contacting an orthopedic specialist. These injuries tend to be prolonged and aggravating. Physical therapy treatment may use different approaches and techniques to decrease inflammation, such as modalities, soft tissue mobilization, and joint mobilizations. In addition, the therapist will evaluate your activities and biomechanics to assist in mitigation of stress to the torn area. Finally the therapist will attempt to re-educate the compromised muscle with prescribed therapeutic activity.

If you would like more information about this issue, or need a physician referral in your area, please call us at 310-860-9720.