Hamstring Origin Tendinopathy

Hamstring tendinopathy (previously known as hamstring tendonitis) is an inflammation of the hamstring tendon attaching to the back of the pelvis. Common symptoms associated with this condition often include: tenderness and pain at the ischial tuberosity (back of the pelvis), pain upon bending the knee against resistance, pain when trying to stretch the hamstring muscles and a gradual onset of pain that occurs after a sprinting session.

Mostly hamstring tendinopathies are caused by overloading the hamstring muscle repeatedly over many weeks and months. This typically happens to athletes, especially sprinters, but is rare amongst non-athletes. Occasionally it can follow a tear of the tendon, which is often treated poorly and is the result of overusing the tendon.

Hamstring tendinopathy can also be caused by poor lower limb biomechanics. For example, problems with surrounding muscles can place more strain through the hamstring, shortening to other muscles in the leg, weakness, or poor positioning of joints/muscles.

Hamstring Origin Tendinopathy Anatomy

Hamstring muscles run down the back portion of the thigh. Three hamstring muscles make up the area: the semitendinosus, biceps femoris and the semimembranosus. They begin at the bottom part of the pelvis in the ischial tuberosity. They cross along the knee joint and the end part of the lower leg. Hamstring fibers join together with the tough, connective tissue of the tendons near the place where the tendons are attached to the bones. The hamstring muscles work to help you extend the leg straight back and bend the knee.

How to Treat Hamstring Origin Tendinopathy:

1. **Reduce Activity**
   One of the best things you can do to help promote the healing process is to allow the tendon the time it needs to heal through rest. The more pressure and stress you put on the injured site, the more likely you are to make the condition worse than it already is. It may not be that you need to stop the sport altogether, but just reduce the intensity, speed, frequency of the sport.

2. **Ice**
   Apply ice to the injured area for five to ten minutes at a time three times per day, or as you have been advised by your therapist. Make sure you don't apply the ice directly onto the skin or you could end up with a burn. By using the ice regularly, you will help to minimize any swelling that has occurred along with the injury. You may need to use the ice for several weeks for the most chronic tendinopathies.

3. **Exercise**

Once the inflammation and pain has subsided, you can begin participating in an exercise program consisting of strengthening and stretching. Thanks to exercise, you will help to rebuild strength in the muscles and tendons of the body to prevent injuries from occurring as often.

4. **Massage**

For hamstring injuries that tend to be more chronic in nature, there is likely to be more weakness and tightness in the muscles, which can be alleviated through massage. Other therapies may also be useful such as ultrasound, electrotherapy, shockwave, or acupuncture. Some therapists recommend using a foam roller or spikey ball to help reduce fascial adhesions.

Tips:

- When the hamstring muscles are tight, they are more prone to injuries. Following a regular program of stretching exercises will help to keep the muscles loose.
- During any high-speed activities, the hamstrings tend to be easier fatigued than that of the quadriceps, which leads to injuries.
- When participating in sports like football, basketball and soccer, make sure to warm-up properly to avoid injuries.
- Hamstring injuries tend to occur more often in children because their muscles and bones don't grow at the same rate.
- Sudden jumps, impacts or stretches can cause the muscle to tear from its bone connection.