

Hamstring Tendon Rupture

Tendons are fibrous cords of tissue connecting the muscles with the bones. They are strong, thick, hard structures and are capable of absorbing significant force. However, if the load applied to the tendon is too great, the tendon could rupture. This is a very significant injury and if this happens your sports season is over. Injuries like this can also end sports careers.

Hamstring Tendon Rupture 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.

Hamstring tendons could rupture at either end, and it could be any one of the three hamstring muscles affected. Some of the hamstring muscles have two or more attachments so that if one tendon is ruptured, you are still able to bend your leg and stay mobile.

You will know if you have ruptured the hamstring tendon as initially you will be unable to walk following the injury. You should seek medical attention ASAP, either at the hospital or with a doctor or sports therapist. The injury can then be assessed for the severity, and an ultrasound scan or MRI scan may be performed to determine the exact nature of the injury.

How to Treat a Hamstring Tendon Rupture:

1. Surgery

In most cases you will require surgical re-attachment. You should get to hospital and discuss the options with the doctors. Surgery is best performed within the first 48-72 hours to reduce the chance of scar tissue adhering the torn tendon to another location.

2. Rest

One of the best things you can do for a tendon rupture is to sit back and rest. Placing more pressure onto the tendon is only going to amplify the problem further. You will likely need crutches.

3. Heat

Heat can help to stimulate blood flow to the area. Use a hot water bottle wrapped in a tea towel.

4. Ice

Apply ice to the injured site. Make sure you don't apply the ice directly to the skin or you could end up with a burn. A thin towel often works to keep the ice cool and protect your skin.

5. Elevation

Make sure the injured site is elevated higher than that of heart level. Proper elevation is important to help minimize swelling and keep pain at bay.

6. Exercise

Based on your degree of rupture, a rehabilitation program might be implemented that consists of strengthening, stretching and sports massage techniques. As you perform the exercises, you will begin to regain movement and progress through the healing process.

7. Anti-Inflammatory Medication

An anti-inflammatory medication can help to reduce pain and inflammation in the injured site. As the swelling diminishes, you will find that the amount of pain you are dealing with will also subside.

Tips:

- Avoid any sudden jumps, impacts and stretches that can tear the muscle from its connecting bone.
- Make sure to exercise caution when engaging in sorting activities such as basketball, football and soccer.
- Make sure to avoid overloading the muscles to prevent any undue stress or pressure on the tendon.
- Muscles that are tight are more susceptible to injury, so make sure to keep them loose.
- A hamstring rupture is often caused by a large, sudden load, so make sure to exercise caution when lifting.
- If you sustain a rupture and then undergo surgery, make sure you work closely with your therapist to ensure that you achieve full range of motion and strength to the hamstring.