Common Peroneal Nerve Entrapment

Common peroneal nerve entrapment tends to be the direct result of an excessive amount of pressure being applied to the peroneal nerve.

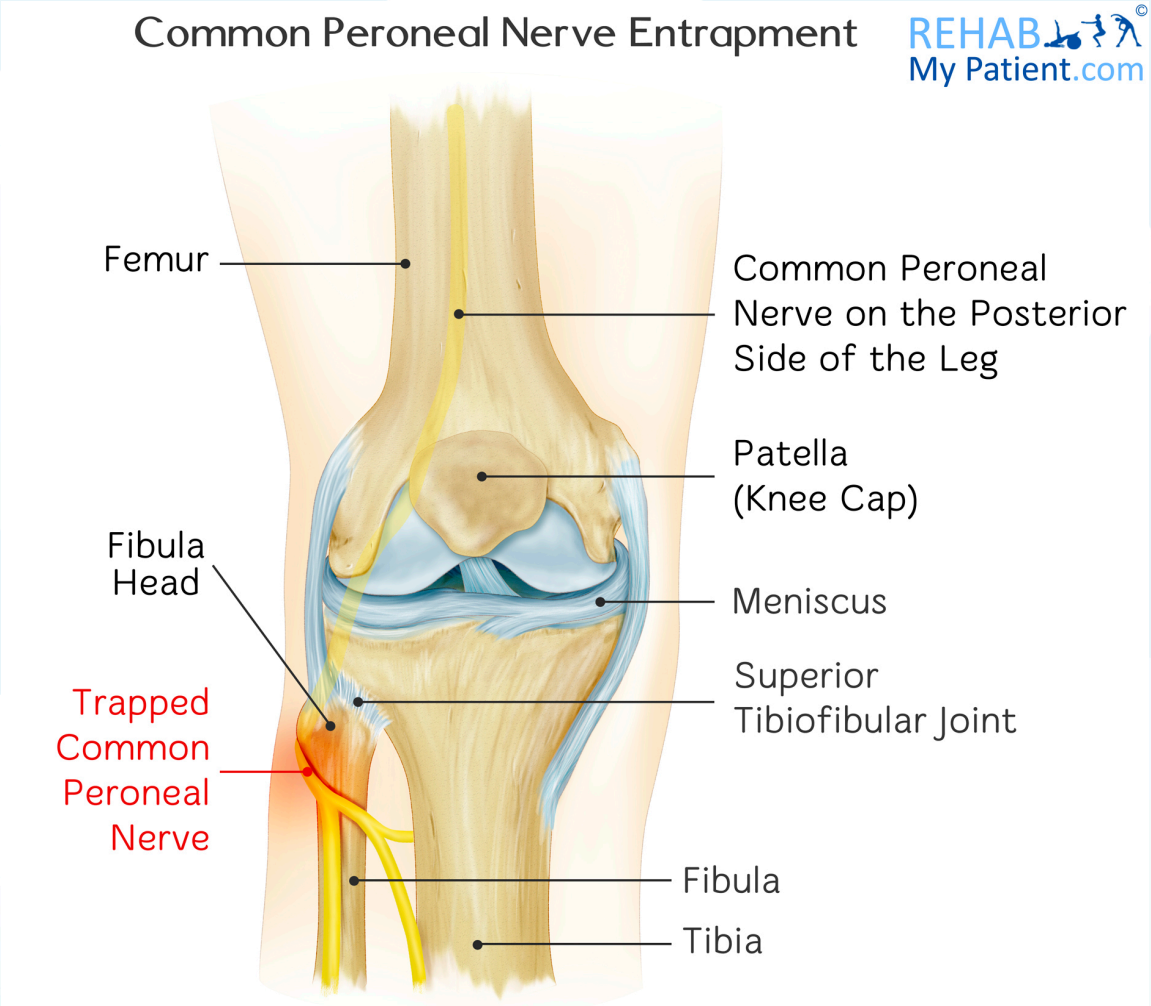
The peroneal nerve usually gets trapped at the lower outside part of the knee. You may notice if you feel your knee there is a bone on the outside called the fibula. The end of the bone is called the fibula head and it forms a joint called the superior tibia-fibula joint. The common peroneal nerve almost wraps around the fibula head and can become impinged or inflamed at this point.

Playing sports and suffering from constant ankle, foot and knee sprains increase your chance of suffering with this particular problem. The problem can also occur in runners.

The underlying causes are unknown. However, some practitioners believe underlying biomechanical issues are to blame with foot or leg alignment. Other causes can be trauma to the outside of the knee from a tackle or collision. Another cause is a hyper-extension injury to the knee causing a sprain to the lateral collateral ligament of the knee.

The most common symptom is a burning pain around the outer aspect of the lower leg. However, common peroneal nerve entrapment is not very common, and other conditions could be ruled out such as peroneal tendinopathy (common) and chronic compartment syndrome (rare).

Common Peroneal Nerve Entrapment Anatomy



Peroneal nerves and their surrounding branches are the ones responsible for controlling the muscles extending into the foot, toes and ankle. The nerve provides the outermost side of your foot and lower leg with the ability to feel.

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When this nerve is injured, it causes problems with feeling and being able to control all of the muscles within those areas, or in mild cases just cause tingling and pain along the lower outside part of the leg. Injuries commonly occur at the site where the nerve ends up passing along the fibular head. In turn, the nerve ends up getting trapped, causing you to suffer with pain, numbness, tingling or burning.

How to Treat Common Peroneal Nerve Entrapment:

1. **Ice**
   One of the best things you can do is to apply ice to the affected area. It will help to reduce inflammation and swelling of the nerve to help alleviate some of the pain and discomfort. Apply the ice in 20 minute intervals for best results. Never apply the ice directly to your skin as it could cause a burn on your skin.

2. **Therapy**
   Osteopathy, Physio and chiropractic can help with leg biomechanics. Also deep tissue massage to the peroneal and calf muscles, and iliotibial band can help ease symptoms, as well as mobilization and treatment to the fibula head. Osteopaths and chiropractors do have manipulation techniques applied directly to the fibula head which can mobilise the common peroneal nerve.

3. **Surgery**
   If you end up developing a cyst or the pain simply doesn't seem to be getting better, surgery might be the only option. During the surgery, the surgeon will help to relieve some of the excess pressure being placed on the nerve. A fascial release can help to relieve pressure stemming from compartment syndrome. By doing the surgery early on, you increase your chance of being able to recover fully.

4. **Pain Medication**
   To help relieve some of the pain, an anti-inflammatory can also be used. It will help to reduce some of the inflammation at the injury site and help you to make it through the day without having to be in so much pain. This works great when used with icing the area but should only be used short term.

Tips:

- Spend time warming up before you head out to engage in any type of physical activity. Even if it is only five minutes, that five minutes can make the world of difference.
- Get your gait checked by a podiatrist or physiotherapist.
- Participate in some type of cardiovascular fitness routine at least a few times a week, but one that is off weight bearing if possible such as swimming or cycling.
- Stretching exercises to the calves and peronei muscles can help – ask your therapist for advice on which stretches to do.