
Foot Drop and the Common Peroneal Nerve

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DELLON INSTITUTES FOR PERIPHERAL NERVE SURGERY®

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YOUR COMPLAINTS ARE

Cannot lift up your foot, or your toes, so your foot drags.

Numbness or buzzing from your knee to top of toes.

You feel like your leg is going to “give out” on you.

The top of your foot hurts, or your big toe does not lift up.

If the bottom of your foot bothers you, too, you also may have Tarsal Tunnel Syndrome, or Neuropathy. (Please see the *Tarsal Tunnels* and *Neuropathy* brochures for more information.)

WHAT CAUSES YOUR COMPLAINTS?

A nerve the thickness of a pen, the *Common Peroneal Nerve*, crosses from behind your knee, around the outside of your knee, to enter the muscles of the outside of your leg.

This nerve gets compressed between the white covering of the muscles and the underlying bone, the fibula, in what is called the *fibular tunnel*.

If your leg is stretched, your ankle twisted, or your knee injured, the common peroneal nerve can be compressed.

TREATMENT WITHOUT SURGERY

There is not a specific treatment to help this nerve if it is injured.

The common peroneal nerve often recovers function on its own within three months after an injury.

If you have foot drop, you should wear a splint called an AFO DEVICE, to hold your foot in position and prevent heel cord contracture.

WHEN SHOULD I HAVE SURGERY?

If the symptoms continue past three months, it means the injury is serious: *the nerve needs to be decompressed*.

You probably had electrodiagnostic testing once or twice. If this test showed twice in a row that the muscles lost nerve supply, then you need to have surgery.

If neurosensory testing with the Pressure-Specified Sensory Device™ (see the *Neurosensory Testing* brochure for more information) does not show that the nerve is regenerating, then surgery is needed.

Even if surgery cannot permit the nerve to make the muscles work again, the foot can be placed into a better functional position by either a tendon transfer or an ankle fusion.

Usually, the sensory symptoms can be improved.

WHAT IS THE SURGERY LIKE?

The surgery takes about one hour for a decompression.

The surgery is performed as an outpatient procedure.

General anesthesia is used.

A two inch incision is made at the outside of the leg, just below the knee.

The structures that compress the common peroneal nerve are released, including the white covering (fascia) of the muscles, fibrous bands deep to the muscles, and the opening into the muscle compartment is opened.

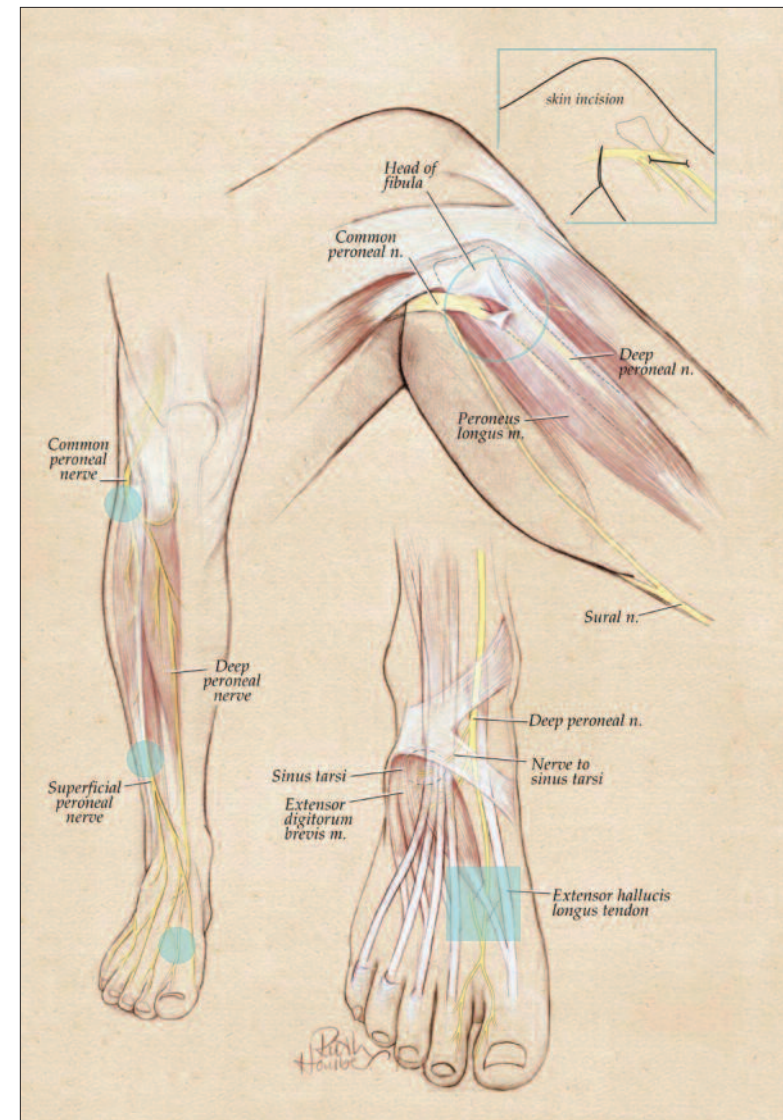
You can walk immediately after the surgery.

Sensory and motor function can take up to one year to recover.

If the common peroneal nerve has been divided, then it can be reconstructed. This may require nerve grafting or a NEUROTUBE™ (please see the *Nerve Reconstruction* brochure for more information).

Tendon transfer for persistent foot drop requires taking an active tendon located in the back of the leg and rerouting it so it lifts the ankle from the front. This can give active ankle function again, or at least hold the ankle in a better position. This is not further discussed in this brochure.

WHAT DOES THE NERVE LOOK LIKE?



BLUE DISKS

The three sites of at which the peroneal nerve can be compressed are circled in the illustration at the left.

BLUE RECTANGLE

In the top right, the site of incision to decompress the common peroneal nerve is shown at the side of the knee.

BLUE CIRCLE

In the middle, the white covering of the muscle, the fascia, that compresses the common peroneal nerve against the underlying bone (dotted line, the fibula) is shown being divided.

BLUE BOX

Over the top of the foot, the site for decompression of the deep peroneal nerve is shown.

WHAT ARE THE RISKS OF SURGERY?
The published outcomes of the Dellon-approach to the treatment of common peroneal nerve compression offer the best chance for success for relief of your symptoms. There are risks associated with every surgical procedure, such as the risk of anesthesia, bleeding and infection. Complications unique to decompression of the common peroneal nerve are:

- Temporary weakness of the muscles that lift the foot/toes.
- Increased buzzing or tingling from the knee to the toes.
- A painful scar due to entrapment of a small cutaneous nerve in the incision.
- Another site of entrapment, the lower leg (superficial peroneal), or top of the foot (deep peroneal) may require a second surgery to decompress the nerve at that location too.

WHO SHOULD DO THIS SURGERY?
Surgeons from the *Dellon Institutes for Peripheral Nerve Surgery*® have the most advanced training and experience doing this surgery, which offers you the best chance for success.

BEING ACADEMIC IN PRIVATE PRACTICESM
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- Heel Pain
- Joint Pain
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