



Peripheral Neuropathies

Any surgical or invasive procedure carries risks. Before proceeding, you should seek a second opinion from an appropriately qualified health practitioner.

Peripheral Neuropathies (Nerve Pain due to problems with small nerves)

What are peripheral neuropathies?

These are problems with small nerves, often in the limbs (peripheries). They tend to cause a localised pain in the area supplied by the nerve. These can be nerves of the thigh (meralgia paraesthetica), buttocks (cluneal nerves), groin (genitofemoral or ilioinguinal), abdomen (ACNES), legs (saphenous) and head (occipital, auriculotemporal). There are many other nerves which can be affected.

What causes it?

Sometimes these neuropathies can follow damage to the nerve – for example from trauma, injury, or surgery or from illnesses like diabetes. Equally often there is no defined cause, they just seem to come on.

What is nerve pain like?

Nerve pain can have various characteristics. Often it can be sharp, burning, shooting or electrical but can also sometimes just be a dull ache. One of the most common features of nerve pain is that it is constant. Because of this it often bothers people more in the evening and night time when there is nothing else to distract you from it. This differentiates it from other causes of pain such as arthritis which tend to ease when lying still.

Nerve pain can also be long lasting, going on for months or years.

How do you diagnose nerve pain?

Examining a patient with nerve pain you will often find altered sensation to sharp (toothpick) or cold (ice) – that is the ice feels either less cold or more cold in the area of the nerve. This finding strongly suggests a nerve cause of pain

What can be done for it?

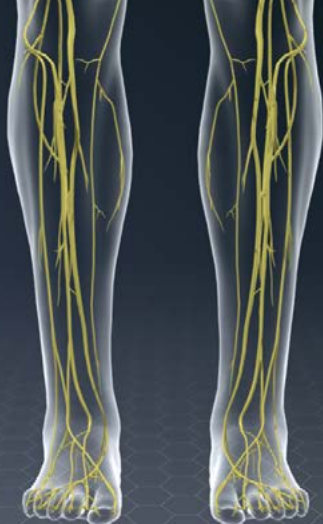
Treatment often starts with nerve pain medications or numbing patches. Nerve pain requires different treatment to normal pain and doesn't respond to usual painkillers.

Exercise has an important effect in suppressing pain and in animal models of nerve damage also helps nerve healing.

Procedural Options

Nerve blocks or injections can be highly effective for nerve pain. Firstly, to definitely diagnose it and also to treat it. The local anaesthetic in nerve blocks can reduce pain for weeks or months (although this is highly variable). The local anaesthetic may also have a hydro-dissection effect – that is freeing up any tissues or adhesions trapping the nerve.

The next step is often a pulsed radiofrequency procedure.



THE PERIPHERIES OF THE BODY ARE INNERVATED BY SMALL NERVES

What is pulsed radiofrequency (PRF)

PRF involves putting a needle next to the nerve and applying a strong magnetic field to the nerve. This is done in the operating theatre as a day case procedure under sedation, often using an ultrasound to locate the nerve. Sometimes this is combined with stimulating the nerve to locate it (this produces a tingling or buzzing sensation in the area of the nerve as the needle gets close to it).

PRF causes changes in the expression of pain-causing genes and can result in pain improvements lasting many months or even years. Again like nerve blocks the effect from this can be highly variable and it sometimes doesn't work or works for only a short time. It can sometimes take days to weeks to have an effect.

In terms of side effects PRF is generally very safe with minimal side effects, although sometimes people can have a flare up of their pain and there are rare risks of infection and damage to tissues around the nerve.

Neuromodulation

Neuromodulation involves stimulation of the spinal cord (or peripheral nerves) with sophisticated electrical signals that alter how these nerves transmit pain signals. Typically, this is done with implanted electrodes connected to a "pacemaker" type battery. There is recent evidence that some types of peripheral neuropathies (e.g. those caused by diabetes) MAY respond to Neuromodulation. This is a very invasive treatment option, and requires very careful discussion and assessment by your Pain Specialist.





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