

## Peripheral neuropathy

Created 1 Feb 2008 - 1:01am

### Symptoms

Pain, numbness, tingling and burning sensations in the extremities of the body, beginning in the feet (particularly the soles of the feet), sometimes in the lower legs and later the hands. Peripheral neuropathy may cause little or no discomfort at first but can become progressively more painful.

### Causes

Peripheral neuropathy is most commonly associated with HIV antiviral drugs in the Nucleoside Reverse Transcriptase Inhibitor ([NRTI](#) [1]A type of anti-HIV drug that works by inhibiting a stage of the HIV life cycle called reverse transcription. Non-nucleosides work in a similar way, but are chemically different.) class i.e. d4T/stavudine (Zerit) and ddI/didanosine (Videx). Less commonly, it is related to AZT/zidovudine (Retrovir), 3TC (lamivudine) and abacavir (Ziagen). In addition to [antivirals](#) [2]A medication or substance which is active against one or more viruses. May include anti-HIV drugs, but these are more accurately termed antiretrovirals., HIV itself (usually in advanced HIV disease) or drugs used to treat HIV opportunistic infections, may also cause peripheral neuropathy.

### Complementary & Supportive Therapy

**Topical applications:** Capsaicin ointments (e.g. Zostrix or APR Cream) made from the active heat ingredient in capsaicums, other deep heat creams or liniments, and local anaesthetic preparations such as lidocaine gel may be applied to the skin surface. Peppermint oil ( *Mentha piperita* ) applied externally to the skin is used in pain relieving balms, massage oils and liniments, due to its main constituent—menthol—which is cooling and anaesthetic when applied to the skin. Camphor ( *Cinnamomum camphor* ), menthol ( *Mentha arvensis* ) and eucalyptus oils ( *Eucalyptus globulus* ) may be suitable alternatives. Cool applications (but not ice) to feet help reduce pain or warm baths may be helpful. Massage, acupuncture and acupressure may also be useful.

Brushing the skin with a soft brush can help soothe and invigorate the irritated nerves, but avoid skin brushing on any areas where the skin is broken.

**Therapy:** A podiatrist, physiotherapist or occupational therapist can provide you with additional specialised therapies and support to alleviate peripheral neuropathy. For severe pain referral to a pain clinic can assist.

**Footwear:** Wear loose fitting but supportive padded shoes and innersoles.

**Dietary supplements:** Lecithin, an essential dietary fat, may assist nerve regeneration where there has been demyelination of the nerve (myelin is a fatty substance surrounding the nerve). B complex vitamins (especially biotin, choline, inositol, cobalamin [B12], folic acid [B9], niacin [B3] (but see precautions page 26), pyridoxine [B6], & thiamine [B1]) promote proper nerve function. L-acetyl- carnitine (LAC) may assist in improving the proper nerve conduction. Alpha-lipoic acid (also known as thioctic acid) acts as an anti-oxidant that helps prevent the neuropathy seen in diabetes. Gamma-linolenic acid is an essential fatty acid found mostly in Evening Primrose Oil ( *Oenothera biennis* ), which provides nutrition to the nerves and assists in the proper nerve conduction of sensory impulses.

Chromium and magnesium may provide further supportive therapy for proper nerve function.

### Medical & Drug Treatment

Symptomatic treatment with tricyclic antidepressants can reduce the pain. Amitriptyline is one type of tricyclic antidepressant (e.g. Tryptanol and Endep), which is often prescribed to counter neuropathy pain. Imipramine (e.g.

Tofranil) may also be used. Anticonvulsants such as carbamazepine (e.g. Tegretol), gabapentin (e.g. Neurontin), and lamotrigine (e.g. Lamictal) have shown some success in treating neuropathy pain.

Pain relievers such as paracetamol (e.g. Panadol) may help. Stronger painkillers may be prescribed to assist with strong or intense pain.

## Special Precautions and Considerations

- When a drug causes peripheral neuropathy, withdrawing that drug sometimes stops the condition worsening. Initially the symptoms may get worse before they improve.
- In the early stages of peripheral neuropathy a podiatrist can provide supportive therapy. When there is more persistent pain and nerve damage that does not respond to available therapies, referral to a neurologist may be required.
- Discuss the pain with a nurse or doctor regularly.
- Try to avoid walking or standing for long periods.

[◀ Lack of appetite](#) [4][up](#) [5][Fatigue](#) [▶](#) [6]

- [peripheral neuropathy](#)

### Links:

[1] <http://www.napwa.org.au/glossary/term/104>

[2] <http://www.napwa.org.au/glossary/term/123>

[3] <http://www.napwa.org.au/glossary/term/95>

[4] <http://www.napwa.org.au/resource/managing-side-effects/lack-of-appetite>

[5] <http://www.napwa.org.au/resource/managing-side-effects/managing-common-side-effects>

[6] <http://www.napwa.org.au/resource/managing-side-effects/fatigue>