

Beyond the barbs

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Peripheral neuropathy (PN) is a debilitating treatment [side effect](#) [1]An unwanted effect caused by the administration of drugs. Onset may be sudden or develop over time. and one of the common reasons for people stopping their anti-HIV medication. People's experience of this form of neuropathy varies from a mild 'pins and needles' sensation or numbness in the hands and feet to very severe pain – "it's like I'm trying to walk with broken glass in my feet".

The pain can sometimes be great enough to put people in a wheelchair, or at least make it difficult to drive a car or walk any distance.

The 'D Drugs' (ddl, d4T and ddC) are widely considered the major cause of this disabling condition, although HIV itself and other drugs (such as AZT, intravenous pentamidine, dapsone and isoniazid or vincristine, a chemotherapy drug) can also be responsible. As use of the 'D drugs' has decreased, so peripheral neuropathy has also declined but for many people it is still a big problem.

Natural therapy treatments aim to firstly reduce pain and other symptoms and, secondly, to reverse the condition and heal damaged nerves.

There are a range of creams and gels that can be directly applied and will bring some improvement for most people. Geranium oil will usually have a quick effect – just rub a small amount into the affected area. 'Sports Gel' – available through the Victorian Positive Living Centre but hard to find elsewhere – has a positive effect that can last for 6-7 hours in people who benefit from it – enough break from continuous pain to get an uninterrupted night's sleep.

There are several other modalities such as acupuncture, Bowen therapy and reflexology that have proved their worth as well – although acupuncture is the most researched.

A recent acupuncture trial with positive results had 21 people with HIV receive acupuncture twice a week for five weeks. The acupuncture was individually prescribed for each person's particular symptoms. That is, the acupuncture treatment was different for everyone and also changed for each individual person at each treatment.

After ten acupuncture treatments, self-ratings of 'present pain' and 'most pain in the last 24 hours' had markedly dropped ($p=0.0002$ and $p=0.0004$ respectively). Other symptoms, such as aching, burning, pins and needles, and numbness in the hands and feet were also significantly reduced ($p<0.0065$)[1].

An earlier trial, comparing the medical drug amitriptyline with acupuncture and with ' [placebo](#) [2]A dummy medical treatment, designed to have no pharmacological effect, administered to the control group of a clinical trial.'

acupuncture over 14 weeks, showed no significant benefit from any of these². However, the acupuncture used in this trial did not take into account people's individual symptoms and so used the same set points for each person throughout the entire trial. This approach to acupuncture will nearly always have a less positive effect than individually prescribed treatments.

But do any of these treatments actually reverse or cure the problem? One treatment that researchers have found that can do just this is the amino acid carnitine.

Interest in carnitine as a possible treatment for PN was sparked with the observation that people with HIV who were taking any of the 'D drugs' were much more likely to develop neuropathy if they were also deficient in acetyl-carnitine³.

Acetyl-carnitine can be thought of as a particularly active form of carnitine in the body – it is made from carnitine and is, among many other things, important for energy production and the maintenance of nerve tissue.

The most recent study of acetyl-carnitine involved 21 people with established [antiretroviral](#) [3]A medication or other

substance which is active against retroviruses such as HIV.-related PN. Ten (48 percent) were taking non-opioid medication to control pain and three (14 percent) needed the stronger opiates to manage pain. Participants took 1500mg of L-acetyl-carnitine per day and were followed up for about three years⁴.

After six months' treatment, twelve (60 percent) of the participants' pain disappeared altogether – including one person who had previously been using opiates. Another three had significant improvement in pain but five had no change and one person's pain got worse. There was also signs of regrowth of damaged nerves. In some people, the regrowth in nerve tissues continued to steadily improve for up to two years.

Depending on your budget, other supplements that may be helpful for this [side effect](#) [4]Any undesired actions or effects of a drug or treatment. Negative or adverse effects may include headache, nausea, hair loss, skin irritation, or other physical problems. Experimental drugs must be evaluated for both immediate and long-term side effects. are lipoic acid⁵, magnesium⁶, vitamin B complex, vitamin E and lecithin.

If all else fails then chilli (sometimes called capsicum) ointment⁷ will almost invariably work to reduce symptoms.

Jim Arachne is the [Complementary Therapy](#) [5]A broad range of healing philosophies, approaches, and therapies that Western (conventional) medicine does not commonly use to promote well-being or treat health conditions. Examples include acupuncture, herbs, Traditional Chinese Medicine, etc. Treatment Officer for the Victorian AIDS Council.

References

¹ "Effect of Acupuncture Administered in a Group Setting on Pain and Subjective Peripheral Neuropathy in Persons with Human Immunodeficiency [Virus](#) [6]A small infective organism which is incapable of reproducing outside a host cell. Disease". Phillips KD., et al. The Journal Of Alternative And Complementary Medicine, Volume 10, Number 3, 2004, pp. 449-455

² "Acupuncture and amitriptyline for pain due to HIV-related peripheral neuropathy". Shlay JC et al., Journal of the American Medical Association 280:1590-1595. November 11, 1998.

³ "Acetyl-carnitine deficiency in AIDS patients with neurotoxicity on treatment with antiretroviral [nucleoside analogues](#) [7]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.". Famularo G., et al., AIDS 1997 Feb;11(2):185-90

⁴ "Acetyl-L-carnitine: a pathogenesis based treatment for HIV-associated antiretroviral toxic neuropathy". Hart AM., AIDS. 2004 Jul 23;18(11):1549-1560.

⁵ "Treatment of diabetic polyneuropathy with the antioxidant thioctic acid (-lipoic acid): A two year multicenter randomized [double-blind](#) [8]A clinical trial design in which neither the participating individuals nor the study staff knows which participants are receiving the experimental drug and which are receiving a placebo (or another therapy). Double-blind trials are thought to produce objective results, since the expectations of the doctor and the participant about the experimental drug do not affect the outcome; also called double-masked study.

[placebo-controlled](#) [9]A method of investigation of drugs in which an inactive substance (the placebo) is given to one group of participants, while the drug being tested is given to another group. The results obtained in the two groups are then compared to see if the investigational treatment is more effective in treating the condition. trial (Aladin II)". Reljanovic, M., et al., Free Radical Research. 1999;31, 171-179.

⁶ "Magnesium level and peripheral neuropathy". Stroud S, et al., Int Conf AIDS. 1994 Aug 7-12;10:202 (abstract no. PB0235).

⁷ "Effect of treatment with capsaicin on daily activities of patients with painful diabetic neuropathy". [Diabetes](#) [10] [Diabetes mellitus] A disorder in which sugars in the diet cannot be metabolised into energy due to a lack of the enzyme insulin. Late-onset diabetes mellitus may be a long-term side effect of some anti-HIV drugs. Care 1992

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- [complementary and alternative therapies](#)
- [didanosine \(ddI\)](#)
- [peripheral neuropathy](#)
- [stavudine \(d4T\)](#)
- [zalcitabine \(ddC\)](#)
- [zidovudine \(AZT\)](#)

Links:

- [1] <http://www.napwa.org.au/glossary/term/469>
[2] <http://www.napwa.org.au/glossary/term/106>
[3] <http://www.napwa.org.au/glossary/term/122>
[4] <http://www.napwa.org.au/glossary/term/471>
[5] <http://www.napwa.org.au/glossary/term/478>
[6] <http://www.napwa.org.au/glossary/term/125>
[7] <http://www.napwa.org.au/glossary/term/104>
[8] <http://www.napwa.org.au/glossary/term/484>
[9] <http://www.napwa.org.au/glossary/term/507>
[10] <http://www.napwa.org.au/glossary/term/95>