

Cannabis and Neuropathic Pain

Neuropathic pain results from damage to or dysfunction of the peripheral or central nervous system, triggered by trauma, infections and nervous system disorders. It is often characterized by pain out of proportion to tissue injury. Pain can develop after injury to any level of the nervous system, peripheral or central; the sympathetic nervous system may be involved. Specific syndromes include postherpetic neuralgia, root avulsions, painful traumatic mononeuropathy, painful polyneuropathy (particularly due to diabetes), central pain syndromes (potentially caused by any lesion at any level of the nervous system), postsurgical pain syndromes, and complex regional pain syndrome. In 2007, a study cited in the *Journal of Pain* estimated that 170 to 270 million people around the world suffer from peripheral neuropathy (e.g., phantom limb syndrome and complex regional pain syndrome) and neuropathic pain.

Neuropathic pain has been described as numbing or burning, plus sensations of tingling, electric shock, crawling, itching, or shooting. Mild pain stimuli are perceived as very painful. Pain on one side of the body is also felt on the other side. The area of pain increases to include larger and larger areas of the body. This type of pain is difficult to treat and often requires a combination of pharmacological therapies, psychological counseling and the use of some form of alternative and complementary medicine.

Standard Treatment

Treatment is complex and often unsatisfactory. Without concern for diagnosis, rehabilitation, and psychosocial issues, treatment has a limited chance of success.

Continuum of Treatments for Neuropathic Pain

In 1990, The World Health Organization established guidelines, given below, for the treatment of malignant pain. This approach recommends beginning with the least invasive and the most easily manageable treatments first before attempting more invasive interventions.

- Exercise
- Meditation and relaxation
- Over-the-counter medications
- Prescribed medications
- Physical rehabilitation
- Cognitive and behavioral therapies
- Oral opioid medications
- Nerve blocking
- Spinal cord stimulation
- Intraspinaly administered opioids
- Tissue destruction procedures

Common Drug Treatments for Neuropathic Pain

- Antidepressants, such as SSRI's including Prozac or Cymbalta, or TCAs such as Elavil
- Anticonvulsants, such as Neurontin or Lyrica

- Topical medications, such as capsaicin cream and lidocaine patches
- Opioids, such as oxycodone and morphine
- Other medications, such as muscle relaxants, anti-anxiety medicines and sleep medicines

Alternative Therapies

- Mind-body awareness, mindfulness, guided imagery and visualization
- Energy therapy, such as low level laser therapy, magnets, electromagnetic therapy, TENS unit
- Acupuncture
- Body therapy, such as massage, acupressure, therapeutic touch, reiki, qigong
- Nutritional therapy, such as fish oil – anti-inflammatory, vitamin B complex, especially B6 – nerve nutrient, magnesium – muscle relaxant, often low in peripheral neuropathy, alpha lipoic acid – antioxidant used in diabetic neuropathy, glutathione – strong antioxidant
- Herbs, such as Oat seed - nerve calming and tonic, Ginko biloba – increases peripheral circulation, St. Johnswort – increases serotonin and nerve tonic
- Hydrotherapy – hot epsom salt soaks, herbal warm packs and analgesic packs – castor oil, hemp oil, chinese herbal liniment
- Homeopathic remedies, such as Hypericum – for nerve pain
- Biofeedback

Cannabis and Neuropathic Pain

Cannabis has been known to be effective for nerve pain for a long time. In the late 1800's an American professor of medicine, Hobart Hare, who wrote in his textbook that "cannabis is very valuable for the relief of pain, particularly that depending on nerve disturbances" (Hare and Chrystie 1892). Horatio Wood, a contemporary of Hare, wrote in his *Treatise on Therapeutics* that "cannabis is used chiefly for the relief of pain; especially of neuralgic character, although it will palliate even pain of organic origin". Patients often report that they achieve better control of neuropathic pain with cannabis than with many other medications and can often decrease or eliminate their need for Neurontin or Lyrica. The treatment of pain, particularly neuropathic pain, is one of the therapeutic applications of cannabis that is currently under investigation. Several research studies of the efficacy of cannabis in treating neuropathic pain have recently been published. (See references below). Sativex, a cannabis based medicine has been approved in Great Britain for use in the treatment of neuropathic pain in Multiple Sclerosis. Cannabis is slowly becoming accepted as a useful option in the treatment of neuropathic pain. In addition to cannabis's analgesic (pain reduction) properties it also can improve depression that often arises from chronic pain. It may improve appetite, help sleep and eliminate the nausea often caused by opiate analgesics.

References

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