

## Editorial Note on Nociceptive Pain

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Damage to biological tissue causes nociceptive pain, which is a type of pain. Sharp, agonising, or throbbing pain is a common symptom of nociceptive pain. External injuries, such as stubbing your toe, sports injuries, or dental procedures, are common causes. The musculoskeletal system, which comprises the joints, muscles, skin, tendons, and bone, is a common source of nociceptive discomfort. Nociceptive discomfort, whether chronic (long-term) or acute (short-term), can disrupt your daily routine and make it difficult to move, resulting in mobility concerns [1].

One of the two basic types of pain is nociceptive pain. The other form is neuropathic pain, which is brought on by nerve injury.

When nociceptors detect something that could injure the body, nociceptive pain occurs. A chemical, a hot or cold temperature, or a physical force, for example. Nociceptors detect damage to the body's skin, muscles, bones, and connective tissue [2].

### What is the source of nociceptive pain?

The following are some examples of injuries that might generate nociceptive pain:

- Bruises
- Burns
- Cuts
- Broken or fractured bones
- Pain from overuse of muscles or repetitive motions
- Joint injury, such as arthritis or sprains, causes pain [3].

An internal condition, such as cancer or a tumour, might also cause it.

### There are two types of pain: nociceptive and neuropathic

Nociceptive pain differs from neuropathic pain in that it is triggered by a specific stimulus to the body, whereas neuropathic pain is not [4]. Neuropathic pain is a type of pain caused by nerve or nervous system dysfunction. It causes numbness and tingling, as well as shooting and scorching pain. Even if the limb in question isn't present, people can experience neuropathic pain. This is exemplified by phantom limb syndrome.

Many different conditions can induce neuropathic pain, including:

- Alcoholism
- Diabetes
- AIDS or HIV
- Multiple sclerosis is number four.
- Problems with the spine's joints

Chemotherapy might potentially cause it as a side effect [5].

### Acute pain and nociceptive pain are two types of pain

Nociceptive discomfort is frequently acute. Acute pain is a type of pain that lasts for less than three to six months. An injury is frequently

the cause, and it normally goes away once the injury has healed. Acute nociceptive pain differs from neurological or long-term pain in several ways. Acute pain might be more intense and sharp [6].

### What methods do doctors use to treat nociceptive pain?

Nociceptive pain is commonly treated by either treating the underlying problem or waiting for the injury to heal. It's also likely to entail figuring out the best combination of pain-relieving techniques, which could include:

- Strengthening and stretching of the afflicted muscles or joints with physical therapy
- Over-the-counter pain relievers such as acetaminophen and ibuprofen
- Prescription drugs, such as opioids and antidepressants
- Medical therapies such as nerve blockade or electrical stimulation
- Complementary and alternative therapy, such as acupuncture and yoga
- Surgical intervention to address the underlying injury or sickness

### Diagnosis

To access proper treatment, it is very vital to determine whether an individual is suffering from neuropathic or nociceptive pain.

Chronic low back pain (CLBP) is a very common complaint, but in 90 per cent of cases Trusted Source, doctors are not able to identify a physical cause. Often, some of the discomfort people have from CLBP is neuropathic pain.

A diagnostic test called the "pain DETECT questionnaire Trusted Source" was developed to help doctors identify the presence of both neuropathic and nociceptive pain in people with CLBP.

This test is now widely used to evaluate neuropathic pain in many different conditions and diseases, including rheumatoid arthritis.

When doing the questionnaire, a person will be asked to answer 9 questions. Seven of the questions ask them to rate different sensations from their pain on a scale from 0 to 5. They will also be asked how long the pain lasts, rated from -1 to +1, and whether or not the pain radiates, rated from 0 to 2 [7].

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The higher the score, the higher the level of neuropathic pain an individual is likely to be experiencing.

People with diabetes are advised to watch for symptoms of neuropathic pain, particularly in the feet. Neuropathy in the lower limbs is very common in people with diabetes and is a leading cause of amputation.

Neuropathic pain in people with diabetes often begins with numbness, weakness, or burning in the toes. This pain can also get worse at night and make it difficult to sleep [8].

### Location of pain

The most common areas for people to experience nociceptive pain are in the musculoskeletal system, which includes the joints, muscles, skin, tendons, and bone.

Internal organs, such as the intestines, lungs, and heart, can also be subject to nociceptive pain, along with the smooth muscles [9].

In 2005, it was estimated that there were 1.6 million people Trusted Source who had lost a limb in the United States. Researchers believe that vascular problems, trauma, cancer, and armed conflicts will lead to that number rising to 3.6 million by 2050 Trusted Source.

It is estimated that 42.2-78.8 per cent trusted Source of individuals who have had a limb amputated will suffer from phantom limb pain. This kind of neuropathic pain can develop anywhere a limb has been removed.

Roughly half of all people with diabetes experience diabetic peripheral neuropathy (DPN), which is nerve pain affecting the feet and hands. The toes are usually the first part of the body to be affected [10].

### Conflict of Interest

None

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### References

1. Doan RA, Monk KR (2019) Glia in the skin activates pain responses. *Sci* 365(6454): 641-642.
2. Dhandapani R, Arokiaraj CM, Taberner FJ, Pacifico P, Raja S, et al. (2018) Control of mechanical pain hypersensitivity in mice through ligand-targeted photoablation of TrkB-positive sensory neurons. *Nature communications* 9(1): 1-14.
3. Woolf CJ, Ma Q (2007) Nociceptors-noxious stimulus detectors. *Neuron* 55(3): 353-364.
4. Feinstein B, Langton J, Jameson RM, Schiller F (1964) Experiments on pain referred from deep somatic tissues. *J Bone Joint Surg A* 39: 981.
5. Hofmann T, Schaefer M, Schultz G, Gudermann T (2002) Subunit composition of mammalian transient receptor potential channels in living cells. *Proceedings of the National Academy of Sciences* 99(11): 7461-7466.
6. Noël J, Zimmermann K, Busslerolles J, Deval E, Alloui A et al., (2009) The mechano-activated K<sup>+</sup> channels TRAAK and TREK-1 control both warm and cold perception. *The EMBO J* 28(9): 1308-1318.
7. Scholz J, Woolf CJ (2002) Can we conquer pain? *Nat Neurosci* 5(11): 1062-1067.
8. Braz JM, Nassar MA, Wood JN, Basbaum AI (2005) Parallel "pain" pathways arise from subpopulations of primary afferent nociception. *Neuron* 47(6): 787-793.
9. Van Den Pol AN (1999) hypothalamic hypocretin (orexin): robust innervation of the spinal cord. *J Neurosci* 19(8): 3171-3182.
10. Bajo VM, Merchán MA, Malmierca MS, Nodal FR, Bjaalie JG (1999) Topographic organization of the dorsal nucleus of the lateral lemniscus in the cat. *J Comp Neurol* 407(3): 349-366.