

Neuropathic pain in primary care

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Management of patients presenting with chronic pain is a common problem in primary care. Pain management—including treatment of the disease causing the pain, patient counseling, and symptomatic pain relief with pharmacotherapy and other treatments—is important because untreated severe pain causes suffering, disability, impaired quality of life, and reduced work capacity.

In daily practice it is useful to classify chronic pain into three categories: (1) nociceptive pain, which occurs as a result of tissue disease or damage, but in the presence of a functionally intact sensory nervous system (e.g., osteoarthritis); (2) neuropathic pain, which arises when the somatosensory system itself is diseased or damaged (e.g., postherpetic neuralgia); and (3) pain without a known somatic background. Nociceptive and neuropathic pain may also coexist, called mixed pain (e.g., low back pain with a radicular component). Neuropathic pain is currently underdiagnosed and undertreated or treated with drugs that have limited efficacy and risks with long-term use (e.g., NSAIDs).

Depending on the location of the lesion, neuropathic pain is divided into peripheral and central neuropathic pain. Radiculopathies, polyneuropathies, postherpetic neuralgia, nerve traumas (including postsurgical neuralgias), and nerve entrapments are the most common causes of peripheral neuropathic pain. Stroke, multiple sclerosis, and spinal cord injury are examples of central causes of neuropathic pain.

Recognition of neuropathic pain is based on history and clinical examination. Pain location, best documented with a pain drawing, should be neuroanatomically logical, e.g., within a dermatome or an innervation territory of a certain sensory nerve. Sensory testing is the most important part of the clinical examination. Findings in the painful area are compared with those in the contralateral area with different sensory stimuli. Sensation to touch is tested with the fingers, to pinprick with wooden cocktail sticks, to vibration with a tuning fork, and to cold and warmth with cold and warm objects, respectively. Sensation can be impaired (hypoesthesia, hypoalgesia), increased (hyperesthesia, hyperalgesia), altered (allodynia, meaning pain caused by a normally painless stimulus; or otherwise paradoxical, e.g., cold causing a burning sensation). Further neurological examination (e.g., tests for muscle strength, tendon reflexes, or coordination) may be needed in some patients to diagnose the level and type of neurological lesion.

If the cause of neuropathic pain is known and no curative treatment for the disease is available (e.g., chronic postherpetic neuralgia), symptomatic treatment with antidepressants or anticonvulsants can begin. If the cause of the pain is unclear or if there is a possibility of curative treatment (e.g., surgical treatment for nerve entrapment), the patient should be referred to an appropriate specialist. In these cases, symptomatic treatment can also be considered to relieve suffering.

Primary care physicians hold a key diagnostic position because they guide the early management of pain and have a pivotal role in triaging patients for specific treatment approaches. Early diagnosis and a targeted treatment strategy are likely to improve the results of treatment, leading to better pain relief and reducing secondary psychosocial and economic consequences of chronic pain.