

limited its use.¹⁶ Interestingly, the opioid methadone is believed to bind not only to opioid receptors, but to be an antagonist to the NMDA receptor as well. As a result, this opioid is often selected when treating neuropathic pain. Magnesium, known to block the NMDA channel, has been given intravenously to patients with malignant neuropathic pain and has been reported to provide relief.²¹ Additional studies are needed.

Others

Although one study of post-surgical neuropathic pain supports the use of topical capsaicin, other studies suggest the pain associated with application of this drug precludes its use.^{22,23} Ablative procedures, such as nerve blocks, may be of benefit in some patients. However, a recent systematic literature review of chemical sympathectomy for neuropathic pain revealed an inability to draw conclusions regarding the efficacy of this therapy due to poor reporting of outcomes.²⁴ Extradural cortical stimulation, a technique developed in the early 1900s to ascertain the functional role of various cortical areas of the brain, has been reported to be of benefit in neuropathic and central pain syndromes.²⁵ A potentially promising area is prevention of neuropathy. For example, studies are underway which evaluate the use of oral glutamine to prevent chemotherapy-induced peripheral neuropathies. Other areas that are theoretically interesting include the use of local anesthetic blockade or other analgesics prior to or during surgery, to preemptively relieve neuropathic pain. Additional research is needed.

REHABILITATION AND SAFETY FACTORS

Rehabilitation begins with assessment of the patient's functional dependence—their ability to walk, dress, prepare meals, and other activities. Assistive devices may be useful. Physical therapy can increase the strength of involved muscles as well as accessory muscles, which will improve coordination and sensory integration. Physical activity also maintains muscle and ligamentous length, preventing later deformities.

Safety factors are of significant concern for patients with peripheral neuropathies. Healthcare professionals should advise patients to assess temperature of water in home so they can avoid scalding if they are insensitive to heat. Patients should be advised to wear gloves while working in the garden or while washing dishes to prevent cuts or burns. They should also be advised to use oven mitts or potholders when cooking. Walkways in the home should be clear, with no throw rugs that could lead to falls. Well lit hallways and the use of night-lights, especially with the elderly patient, may prevent falls. Non-skid shower and tub mats will also prevent falls while bathing.

CONCLUSION

Neuropathic pain is a chronic, complex pain problem that is often refractory to treatment. Skilled assessment and awareness of the various neuropathic pain syndromes will lead to improved diagnosis and more rapid initiation of treatment. Present treatment strategies rely heavily upon pharmacotherapy. Research is needed to identify new techniques and therapies that not only relieve pain and suffering, but also prevent neuropathy whenever possible.

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