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MADISON NEUROLOGY LLC

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Neurology Care 7 days a Week. Because Your Brain Matters.

Peripheral Neuropathy

Patient education guide · Nerve & Muscle · Madison Neurology LLC

What is it?

Peripheral neuropathy is damage to the nerves outside the brain and spinal cord, most commonly causing numbness, tingling, burning pain, and weakness that begins in the feet and progresses in a 'stocking-glove' pattern. Diabetes is the most common cause in developed countries, but neuropathy has many causes — and identifying the cause changes the treatment.

How does it happen?

Diabetes and prediabetes lead the list, followed by alcohol, chemotherapy, vitamin B12 deficiency, thyroid disease, autoimmune conditions, kidney disease, certain medications, and inherited forms (such as Charcot-Marie-Tooth). In up to a quarter of patients, no cause is found ('idiopathic').

Common symptoms

- Numbness and tingling starting in the toes and feet, spreading upward
- Burning, stabbing, or electric pain, often worse at night
- Balance problems and falls (sensory loss makes footing uncertain)
- Weakness — foot drop, tripping, grip difficulty in more advanced cases
- Extreme sensitivity to touch (allodynia) or, conversely, loss of protective feeling — foot ulcers in diabetics

How is it diagnosed?

Evaluation combines examination with blood tests (glucose/A1c, B12, thyroid, kidney function, protein studies, and others) to find the cause, plus nerve conduction studies/EMG to characterize the nerve damage. Skin biopsy (for small fiber neuropathy) and genetic testing are used in selected cases.

How is it treated?

Treatment has two arms. Cause-directed: tight glucose control in diabetes, B12 replacement, alcohol cessation, thyroid treatment. Symptomatic: neuropathic pain responds to gabapentin/pregabalin, duloxetine, or tricyclic antidepressants (regular painkillers work poorly for nerve pain). Foot care — daily inspection, proper footwear, podiatry — prevents ulcers and is essential when sensation is reduced. Physical therapy addresses balance and fall prevention.

What does the future hold?

Neuropathy from treatable causes (B12, thyroid, alcohol) can improve substantially; diabetic neuropathy stabilizes with good glucose control but rarely fully reverses. Pain is very manageable with the right medications. The practical priorities: protect insensate feet, prevent falls, and keep walking — activity preserves function.

Questions patients commonly ask

Q: Will the numbness spread to my hands?

A: Length-dependent neuropathy ascends slowly — feet first, then hands; treating the cause slows or stops progression.

Q: Why don't regular painkillers help?

A: Nerve pain comes from misfiring nerves, not inflammation — it responds to nerve-calming medications (gabapentin, duloxetine), not ibuprofen.

Q: Is my idiopathic neuropathy serious?

A: Idiopathic cases are usually slow, predominantly sensory, and manageable; regular follow-up monitors for any progression.

National support groups & resources

- **Foundation for Peripheral Neuropathy** — foundationforpn.org
- **American Academy of Neurology — Brain & Life patient resources** — brainandlife.org
- **Muscular Dystrophy Association** — mda.org

(Organization contact details were current at the time of compilation; please verify online.)

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