CONDITION

Multiple peripheral neuritis

Multiple peripheral neuritis is damage to several separate nerves, causing patchy pain, numbness, or weakness.

WHAT IT IS
Damage to several separate peripheral nerves in different areas

BODY SYSTEM
Nervous system

MAIN SYMPTOMS
Patchy pain, numbness, weakness, foot or wrist drop

WHAT CAUSES IT
Often immune inflammation; also diabetes, infection, pressure, or unknown

HOW IT IS DIAGNOSED
Neurologic examination and nerve conduction testing, sometimes nerve biopsy

MAIN TREATMENT
Treating the cause, pain control, and physical rehabilitation

CAN IT BE CURED?
Sometimes - treatable causes may stop further nerve damage

IS IT AN EMERGENCY?
Sometimes - breathing trouble or rapidly worsening weakness

LONG-TERM OUTLOOK
Recovery is often slow and may remain incomplete

Overview

Multiple peripheral neuritis is a pattern of damage affecting two or more separate peripheral nerves in different parts of the body. Peripheral nerves carry messages between the brain, spinal cord, skin, muscles, and internal organs.

The condition is also called multiple mononeuropathy or mononeuritis multiplex. "Mononeuropathy" means damage to one nerve. In this condition, several individual nerves become affected, often at different times.

Symptoms are usually patchy and unequal. For example, you may first develop pain and weakness in one foot, followed later by numbness or weakness in one hand. This differs from many common forms of peripheral neuropathy, which tend to affect both feet in a similar pattern.

The word "neuritis" suggests nerve inflammation, but inflammation is not always the cause. Multiple peripheral neuritis is a condition or nerve-damage pattern rather than one specific disease. Finding the underlying cause matters because some causes need prompt treatment to prevent further nerve injury or damage elsewhere in the body.

Symptoms

Symptoms depend on which nerves are affected. They may develop suddenly, over several days, or in separate episodes across weeks or months.

Common symptoms include:

The pattern is often uneven. One leg may be affected more than the other, or symptoms may appear in a hand and the opposite foot. Each new nerve problem can create another distinct area of pain, numbness, or weakness.

Damage to sensory nerves may make it harder to notice cuts, burns, pressure, or poorly fitting shoes. Damage to motor nerves can affect walking, balance, grip, and fine hand movements.

Some underlying conditions also cause symptoms outside the nervous system. These may include fever, unexplained weight loss, joint pain, a new rash, abdominal pain, or changes in urine. These symptoms do not prove a particular cause, but they are important to report.

- Burning, stabbing, electric, or deep aching pain
- Numbness, tingling, or reduced ability to feel temperature
- Weakness in part of a hand, arm, foot, or leg
- Foot drop or wrist drop, making it hard to lift the foot or hand
- Reduced reflexes
- Muscle thinning after longer-lasting nerve damage

Causes and risk factors

A common mechanism is inflammation of the small blood vessels supplying nerves. This is called vasculitic neuropathy. Reduced blood flow then injures parts of individual nerves. Vasculitis may occur by itself or as part of an immune condition affecting several organs.

Associated immune and inflammatory conditions include polyarteritis nodosa, microscopic polyangiitis, eosinophilic granulomatosis with polyangiitis, rheumatoid arthritis, lupus, and Sjögren disease. Not everyone with these conditions develops nerve damage.

Other possible causes include:

Which infections are relevant depends on your location, travel, exposures, and medical history. Testing everyone for every possible infection is not usually helpful.

Sometimes no cause is found even after a detailed assessment. This may be described as idiopathic multiple mononeuropathy. "Idiopathic" means that the cause remains unknown.

- Diabetes
- Infections such as HIV, hepatitis B or C, Lyme disease, and leprosy
- Sarcoidosis or amyloidosis
- Pressure, injury, or entrapment affecting several separate nerves
- Certain blood disorders or cancers
- Some medicines or toxic exposures

Diagnosis

There is no single test that identifies every case and its cause. Diagnosis usually combines your symptom pattern, a neurological examination, electrical nerve tests, and tests for an underlying condition.

During the examination, a clinician checks strength, reflexes, sensation, walking, balance, and the distribution of symptoms. A patchy pattern involving separate named nerves can suggest multiple mononeuropathy, but other problems can look similar.

Nerve conduction studies measure how well electrical signals travel through peripheral nerves. Electromyography, usually called EMG, records electrical activity in selected muscles. Together, these tests can show whether several separate nerves are damaged, how severe the damage is, and whether the main injury involves the nerve fibres or their insulating covering.

Blood and urine tests are selected according to your symptoms and medical history. They may look for diabetes, inflammation, immune activity, infection, vitamin deficiency, blood-cell abnormalities, or kidney and liver problems.

If vasculitis is strongly suspected, a biopsy may be considered. This involves removing a small sample of a sensory nerve, sometimes together with nearby muscle, for examination under a microscope. Biopsy can show inflamed or damaged blood vessels, but it is not needed in every case and can leave permanent numbness where the sampled nerve supplied sensation.

Imaging may be used when pressure on a nerve, a mass, or a problem involving a nerve

network is possible. Tests also help distinguish this condition from a pinched spinal nerve, spinal cord disorder, muscle disease, or a more symmetrical polyneuropathy.

Treatment and management

Treatment has two aims: control the underlying cause and help you manage the effects of nerve damage. Starting cause-specific treatment promptly may reduce the chance of additional nerves becoming affected. It cannot always reverse damage that has already occurred.

When blood-vessel inflammation is responsible, treatment usually involves medicines that reduce immune activity. Corticosteroids and other immune-suppressing medicines may be used according to the type and severity of vasculitis. These treatments require monitoring because they can have significant side effects.

An infection needs treatment directed at that infection. Immune-suppressing treatment is not interchangeable with antimicrobial treatment, so identifying the cause is important.

Management may also include improved diabetes care, stopping an identified toxic exposure, or relieving pressure on a trapped nerve. Any medicine changes should be supervised rather than made suddenly.

Nerve pain may be treated with medicines that change how pain signals are processed. These can include certain anti-seizure medicines, antidepressants like sertraline or fluoxetine , or topical treatments. The choice depends on other health conditions, possible side effects, and how the pain affects sleep and daily life.

Physical and occupational therapy can help preserve movement and independence. Treatment may involve strengthening, safe stretching, balance training, and ways to perform tasks with less strain. A brace can support a weak ankle or wrist. Walking aids may reduce falls while strength is limited.

If sensation is reduced, inspect affected skin regularly. Well-fitting footwear and early attention to blisters or pressure areas can help prevent wounds.

Complications

Nerve damage can lead to lasting weakness, numbness, or neuropathic pain. Foot drop may alter walking and increase the risk of falls. Hand weakness can affect writing, fastening clothes, cooking, or work tasks.

Reduced sensation can allow burns, cuts, or pressure injuries to go unnoticed. Long-standing weakness may cause muscle loss or joints to become stiff.

Complications from the underlying cause may be more serious than the nerve symptoms. For example, systemic vasculitis can also affect the kidneys, lungs, skin, heart, or digestive system. Follow-up is therefore based on both nerve function and the condition causing the damage.

Prevention

Multiple peripheral neuritis cannot always be prevented. Immune diseases and unexplained cases may develop without a known avoidable trigger.

When diabetes is present, managing blood sugar and other cardiovascular risks may reduce further nerve injury. Avoiding repeated pressure on vulnerable nerves and using protective equipment around known workplace toxins can lower some risks.

Prompt assessment of new patchy weakness or numbness is not guaranteed to prevent the condition. However, identifying a treatable cause early may limit additional nerve damage.

Living with it and what to expect

The course over months and years is closely tied to the cause. Some people have one period of nerve injury that stops after treatment. Others have new episodes if an inflammatory condition remains active or returns.

Pain may improve before strength and sensation. Damaged nerve fibres recover slowly, and recovery can continue for many months. If a nerve has been severely injured, some weakness or numbness may remain permanent. Rehabilitation helps you make the best use of recovering muscles and adapt to lasting changes.

Follow-up may include repeated strength and sensory examinations, blood tests for the underlying condition, and occasional repeat nerve testing. Report new areas of weakness or numbness rather than waiting for a routine appointment, because they may indicate fresh nerve injury.

Many people continue work, exercise, family activities, and travel, sometimes with changes to footwear, equipment, schedules, or tasks. Braces, therapy, pacing, and workplace adjustments can support independence. The amount of support needed is different for each pattern of nerve damage.

When to get medical help

Arrange a prompt medical assessment if you develop new patchy pain, numbness, or weakness, especially when one hand, foot, or limb is affected differently from the other. New foot drop, wrist drop, repeated falls, or trouble using your hand should not wait for a routine check-up.

Seek urgent same-day advice if established symptoms are worsening quickly or spreading to new areas. Fever, a new rash, unexplained weight loss, severe abdominal pain, blood in the urine, or marked weakness alongside nerve symptoms may point to a condition affecting more than the nerves.

Call emergency services if you develop:

For routine follow-up, mention changes in pain, balance, skin condition, daily activities, or medicine side effects. A sore or blister in an area with reduced sensation also needs timely attention, even if it is not painful.

- Trouble breathing or swallowing
- Rapidly worsening weakness that affects standing or walking
- Sudden facial drooping, speech difficulty, or weakness on one side
- Fainting, severe chest pain, or severe shortness of breath

Common questions

Is multiple peripheral neuritis the same as peripheral neuropathy?

It is one pattern of peripheral neuropathy. Peripheral neuropathy is a broad term for damage to nerves outside the brain and spinal cord. Multiple peripheral neuritis affects several separate nerves in an uneven pattern, rather than causing the more typical matching numbness in both feet.

Is multiple peripheral neuritis an autoimmune condition?

Not always. Immune inflammation and vasculitis are important causes, but diabetes, infections, pressure injuries, toxins, and other conditions can produce the same nerve pattern. The term describes which nerves are affected, not why they were damaged.

Can the nerves heal?

Some nerve recovery is possible if the cause is controlled and the nerve has not been completely destroyed. Pain may settle relatively early, while strength and sensation can take

months to improve. Severe damage may leave permanent symptoms.

Can it spread from one nerve to another?

The nerve damage itself is not contagious and does not physically travel between nerves. However, an active underlying condition can injure additional nerves at different times. A new area of weakness, pain, or numbness should therefore be reported promptly.

Can I exercise with multiple peripheral neuritis?

Appropriate activity can help maintain strength, movement, and balance. Exercise may need to be adjusted if you have significant weakness, reduced sensation, inflamed joints, or an active systemic illness. A physical therapist can help identify safer activities and reduce the risk of falls or overloading weak muscles.

Will I need a nerve biopsy?

Most people do not automatically need one. A biopsy is mainly considered when vasculitis or another condition affecting nerve tissue is suspected and the result would change treatment. Nerve conduction studies and blood tests are usually performed first.

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