

## Pins and needles

'Pins and needles' (paresthesia) is a sensation of uncomfortable tingling or prickling, usually felt in the hands or feet. The affected area is sometimes said to have 'fallen asleep'.

A common cause is leaning or lying awkwardly on a limb, which either presses against the nerves or reduces the blood supply to the local area. Changing position quickly restores normal feeling. Any numbness is soon replaced by a tingling and prickling sensation, as the nerves start sending messages again to the brain and spinal cord.

In some cases, pins and needles are caused by nerve damage or certain disorders of the central nervous system. Always see your doctor if you experience frequent or persistent bouts of pins and needles.

### Symptoms of pins and needles

The symptoms include:

- Hands and feet are usually affected
- Initial numbness and heaviness
- Prickling and tingling sensation on the skin
- Return of normal feeling a few minutes after changing position.

### Causes of pins and needles

Pins and needles can be caused by a wide range of events and conditions, including:

- Pressure on nerves
- Reduced blood supply
- Nerve injury
- Hyperventilation or breathing excessively
- The effect of toxic substances on the nerves, such as alcohol or lead
- Certain medications
- Diabetes
- Multiple sclerosis
- Hypothyroidism (underactive thyroid gland)
- Transient ischaemic attack (TIA)
- Stroke.

### Pressure-related pins and needles

The peripheral nerves of the body send information back to the brain and spinal cord. When a sensory nerve is pressed by being in a cramped or awkward position, it begins to stop working. In time, the affected limb 'falls asleep', which means the sensory messages are blocked.

Once pressure is taken off the nerve, functioning resumes. The uncomfortable prickling sensation is caused by the restarting of pain messages from nerves to the brain. Other nerves, such as those that provide information on temperature, take a little longer to recover.

### Pinched nerve

Nerves can be pinched by bones and other tissue. Some examples include:

- **Carpal tunnel syndrome** – the main nerve that services the hand runs through a ring of wrist bones. Inflamed and swollen tendon membranes reduce the amount of room inside the wrist and squash the nerve. Symptoms include pins and needles, pain and weakness.
- **Cervical nerve root irritation** – nerves in the neck exit the spinal cord via small holes between the vertebrae. These small holes can be narrowed by inflammation, injury or outgrowths of bone tissue (bone spurs). The nerves are compressed, causing pins and needles and, sometimes, referred pain into the arms.
- **Sciatica** – the legs and feet are serviced by the sciatic nerve, which starts as four nerve roots between the vertebrae of the lower back. Each vertebra is cushioned by discs of cartilage. A prolapsed or 'slipped' disc bulges out and presses against one of the roots of the sciatic nerve, causing pins and needles and referred pain down the leg.

## Neuritis

Neuritis is inflammation of the nerves. Some of the causes include:

- **Alcohol** – chronic overconsumption of alcohol can be toxic to nerves and cause a condition called peripheral neuropathy, characterised by pins and needles.
- **Guillain-Barre syndrome** – thought to be triggered by some kinds of viral and bacterial infection.
- **Pernicious anaemia** – causes a vitamin B12 deficiency that affects the functioning of the spinal cord.

## Nerve disease

Nerve disease, or neuropathy, is characterised by the lack of sensory information to the brain due to damage of the sensory nerves. For example, a person with neuropathy may not experience pain to the normal degree, if at all.

Conditions that may damage the sensory nerves include:

- Severed spinal cord
- Diabetes
- Charcot-Marie-Tooth inherited neuropathy
- Exposure to certain drugs and heavy metals, such as lead
- Chronic overconsumption of alcohol.

## Seek medical advice

The occasional bout of pins and needles is a harmless event. However, chronic pins and needles can be a warning of some other underlying disorder. Always see your doctor for a thorough medical investigation if you experience persistent or frequent episodes of numbness or pins and needles.

## Treatment for pins and needles

Treatment depends on the cause. For example, carpal tunnel syndrome may be treated with rest, splinting and medications such as anti-inflammatory and diuretic drugs. A nerve pinched by bone or some other tissue may require treatment such as physiotherapy or (in some cases) surgery to ease the pressure and allow full nerve functioning to resume.

Underlying conditions such as diabetes need to be properly controlled to ease associated symptoms, including pins and needles. The symptoms of nerve inflammation and damage caused by chronic overconsumption of alcohol generally improve once the person stops drinking.

## Where to get help

- Your doctor
- A physiotherapist
- Australian Physiotherapy Association Tel. (03) 9092 0888 or Find a Physio

## Things to remember

- 'Pins and needles' is a sensation of uncomfortable tingling or prickling, usually felt in the hands or feet.
- A common cause is leaning awkwardly on a limb, which presses against the nerves.
- Persistent pins and needles may be symptomatic of more serious conditions, such as nerve disease or nerve inflammation.
- Always see your doctor if you experience persistent or frequent episodes of pins and needles.

**This page has been produced in consultation with, and approved by:**

Australian Physiotherapy Association

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