Summary

- 'Pins and needles' are a sensation of uncomfortable tingling or prickling, usually felt in the arms, legs, hands or feet.
- A common cause is pressure on a specific part of the arm or leg, which causes compression of nerves. This usually resolves quickly when the position is changed and the pressure is removed.
- Persistent pins and needles may be symptomatic of more serious conditions, such as nerve injury or inflammation.
- Always see your doctor if you experience persistent or frequent episodes of pins and needles.

'Pins and needles' (paresthesia) is a sensation of uncomfortable tingling, prickling, itching or skin crawling usually felt in the hands or feet. The affected area is sometimes said to have 'fallen asleep'. A common cause of pins and needles is leaning or lying awkwardly on an arm or leg, which either presses against the nerves or reduces the blood supply to the local area. Changing position usually quickly restores normal feeling as the nerves start sending messages to the brain and spinal cord again. In some cases, pins and needles are caused by temporary or permanent 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

Common features of pins and needles include:

- prickling and tingling sensation
- numbness
- return of normal feeling a few minutes after changing position.

Hands, arms, legs and feet are the parts of the body most commonly affected.

Causes of pins and needles

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

- pressure on nerves (frequent in pregnancy)
- pinched nerves
- inflammation of the nerves (neuritis)
- nerve disease (neuropathy)
- reduced blood supply
- nerve injury
- hyperventilation or breathing excessively
- the effect of toxic substances on the nerves, such as alcohol or lead
- the use of certain medications
- diabetes
- multiple sclerosis
- hypothyroidism (underactive thyroid gland)
- transient ischaemic attack (TIA)
- stroke.

Pressure-related pins and needles
The 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 the messages are interrupted, which can cause pins and needles.

Once pressure is taken off the nerve, functioning resumes. An uncomfortable prickling sensation is caused by the restarting of pain messages from nerves to the brain. This usually resolves within minutes. An example of this is when you hit your elbow and feel a tingling sensation in your little finger.

Pinched nerves and pins and needles

Nerves can be compressed or ‘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 irritate or compress the nerve. Symptoms include pins and needles, pain and weakness in the hand
- **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 irritated or 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 between the vertebrae of the lower back. This nerve can be irritated or compressed due to problems in the lower back or pelvic or buttock area causing pins and needles, and sometimes pain, down the legs.

Neuritis

Neuritis is inflammation of the nerves. Pins and needles are one of the symptoms of neuritis. Some of the causes of neuritis include:

- **alcohol** – chronic overconsumption of alcohol can be toxic to nerves and cause a condition called peripheral neuropathy
- **Guillain-Barre syndrome** – an autoimmune condition in which the person’s nerves are attacked by the body’s own immune defence system, thought to be triggered by some kinds of viral and bacterial infection.

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 usual degree, if at all.

When to seek medical advice for pins and needles

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 medications. A compressed or irritated nerve may require treatment such as physiotherapy, medication 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

- **Australian Physiotherapy Association** Tel. 1300 306 622
- Your **GP (doctor)**.
- **Physiotherapist**