Wrightington, Wigan and Leigh Teaching Hospitals
NHS Foundation Trust

Percutaneous Tibial Nerve Stimulation (PTNS)

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Patient Information

Pelvic Health Team

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Who is it for?

Percutaneous tibial nerve stimulation (PTNS) is used to treat some bladder and bowel problems.

Bladders

For people with an Overactive Bladder. People can experience urinary urgency, empty their bladder very frequently both day and night, and will often leak urine if they don’t reach the toilet quickly enough.

Bowels

For people with urgency of their bowels which can lead to bowel leakage if they don’t reach the toilet quickly enough.

PTNS should not be used in patients with:

- Recent kidney stone removed by lithotripsy
- Knee replacements
- Nerve damage

What is PTNS?

PTNS is a form of treatment which is called neuromodulation. Bladder and bowel function is regulated by a group of nerves at the base of the spine called the sacral nerve plexus. By stimulating these nerves through gentle electrical impulses, the bladder and bowel activity can be changed.

PTNS is a minimally invasive procedure carried out in an outpatient setting. It stimulates the nerves in the leg (tibial nerves), which in turn stimulate the sacral nerves.

How is it done?

A small, slim needle electrode (like an acupuncture needle) is temporarily inserted just above the ankle. This is then connected to a battery powered stimulator. The stimulator delivers a mild electric current along the needle into the tibial nerve.

Each treatment session will last approximately 30 minutes. The treatment consists of 12 treatments, one week apart.

What does it feel like?

People respond in different ways, but most patients feel a buzzing, tingling, or throbbing when the machine is turned on.

The current can then be turned down, so that the treatment is comfortable. It is not necessary to feel this throbbing for the whole 30 minutes.

What are the results?

This is a relatively new treatment, but the published studies have shown 3 out of 4 people had a reduction in their bladder symptoms or bowel symptoms after treatment.

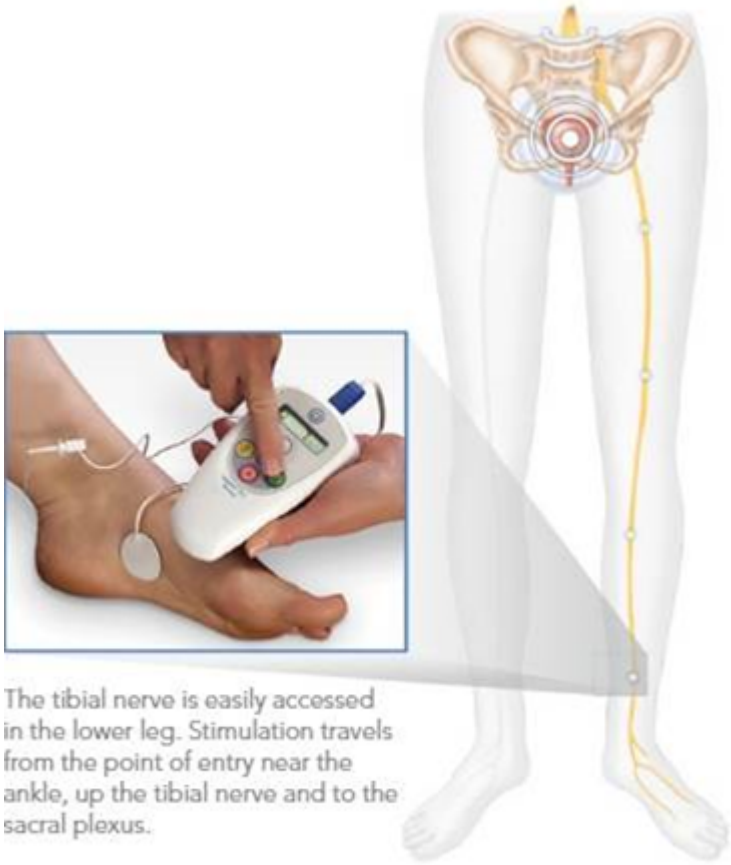
It usually takes between 6 and 10 treatments before any change in symptoms is apparent. It is important that there is no gap in the twelve-week programme, as this can affect the success of the treatment. If holidays are planned, it is best to delay the start of the treatment until afterwards.

Some patients need to return for booster treatments as the effects can start to wear off after 4-6 months.

As it is a relatively new treatment, it is not known how effective it is long term.

How is the treatment done?





The tibial nerve is easily accessed in the lower leg. Stimulation travels from the point of entry near the ankle, up the tibial nerve and to the sacral plexus.

Treatment

As this is a new treatment, it is important to collect as much information about your problem both before and after treatment. You will be asked to fill in some assessments/questionnaires about your symptoms and the effect it has on your life.

- You will be asked to sit in a chair or on a couch with the treatment leg elevated.
- The ankle will be cleaned
- The thin needle is inserted above the ankle

- A sticky pad is attached to the arch of the foot
- The leads are then attached to the stimulator
- The stimulator will be turned on and the settings adjusted
- A sensation will be felt in the ankle or foot
- Toes may spread out and curl

The stimulator will deliver 30 minutes of treatment, during this time you can read or do crosswords etc.

After treatment, the needle will be removed, and normal activities can be resumed immediately.

Please report any side effects, you may experience.

If there are any further questions, please do not hesitate to ask.

What are the risks?

PTNS is a very safe procedure but should not be used for:

- People with pacemakers or implantable defibrillators

- People prone to excessive bleeding
- Women who are pregnant, or planning to become pregnant during the treatment
- People with peripheral nerve damage or circulatory problems

Potential side effects:

- Discomfort and pain near the stimulation site
- Redness and inflammation at or near the stimulation site
- Bruising
- Toe numbness
- Stomach-ache

There are currently no recorded serious side effects

What are the benefits?

PTNS is a minimally invasive treatment which can improve the symptoms of overactive bladder and/or bowel leakage and urgency.



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