



British Society of Urogynaecology  
Registered charity No 1143157

# **Percutaneous Tibial Nerve Stimulation for Overactive Bladder Symptoms**

**Patient Information Leaflet**



## About this leaflet

The information provided in this leaflet should be used as a guide. There may be some variation in how each clinician performs the procedure, the care immediately afterwards and the advice given to you when you get home. You should ask your clinician about any concerns that you may have.

You should take your time to read this leaflet. A page is provided at the end of the leaflet for you to write down any questions you may have. It is your right to know about your planned procedure, why it has been recommended, what the alternatives are and what the risks and benefits are. These should be covered in this leaflet. You may also wish to ask about your clinician's personal experience and results of treating your condition.

## Benefits and risks

The success and the risks of most procedures carried out to treat prolapse and incontinence have been poorly studied and so it is often not possible to define them clearly. In this leaflet risks may be referred to as common, rare etc. or an approximate level of risk may be given. Further information about risk is explained in a leaflet published by the Royal College of Obstetricians and Gynaecologists "Understanding how risk is discussed in healthcare".

<https://www.rcog.org.uk/globalassets/documents/patients/patient-information-leaflets/pi-understanding-risk.pdf>

The following table is taken from that leaflet

Verbal description <sup>a</sup>	Risk	Risk description <sup>b</sup>
Very common	1 in 1 to 1 in 10	A person in family
Common	1 in 10 to 1 in 100	A person in street
Uncommon	1 in 100 to 1 in 1000	A person in village
Rare	1 in 1000 to 1 in 10000	A person in small town
Very rare	Less than 1 in 10000	A person in large town

<sup>a</sup> EU-assigned frequency  
<sup>b</sup> Unit in which one adverse event would be expected

## British Society of Urogynaecology (BSUG) database

In order to better understand the success and risks of treatment for prolapse and incontinence the British Society of Urogynaecology has established a national database. All members of the society are asked to enter all procedures that they carry out onto the database and you may be asked to consent to this for your treatment. The data collected are being used to develop an overall picture of what procedures are being performed throughout the United Kingdom together with complications and outcomes. Individual clinicians can also use it to evaluate their own practice.

## **What is Percutaneous Tibial Nerve Stimulation (PTNS)?**

- The sacral plexus of nerves is responsible for regulating both bladder and bowel function; stimulation of these nerves can help to improve bladder and bowel problems. Nerve stimulation can be achieved by using an implantable stimulator or by PTNS.
- PTNS is a form of treatment which is called neuromodulation. It is a minimally invasive procedure carried out in an outpatient setting.

## **What condition(s) does PTNS treat?**

- It is carried out to improve overactive bladder symptoms.
- Overactive Bladder (OAB) is a condition comprising of a set of urinary symptoms: needing to visit the toilet more frequently both during the day and at night (nocturia) accompanied by urgency (a sudden desperate need to pass urine), with or without urgency incontinence (leaking before you can get to the toilet).
- OAB is common, affecting at least 10% of the adult population, men as well as women.
- It is more common in older people, in those who have had pelvic surgery (gynaecological or urological) and in the presence of neurological disease. However, many people have no obvious cause for their overactive bladder symptoms.

## **How is PTNS done?**

You will be asked to sit in a chair or a couch with your treatment leg elevated. Your clinician will:

- Clean your ankle and the arch of your foot on the treatment leg
- Insert a thin needle electrode above your ankle
- Attach a sticky pad to the arch of your foot
- Connect the components to the stimulator
- You will remain comfortably seated for the 30 minute treatment.

## **To determine the optimal treatment settings:**

Your clinician will turn on the stimulator and adjust the setting.

- You will feel a sensation in the ankle or foot
- Your toes may also spread out and curl.
- Let your clinician know if the sensation is too strong or if your sitting position is too uncomfortable.

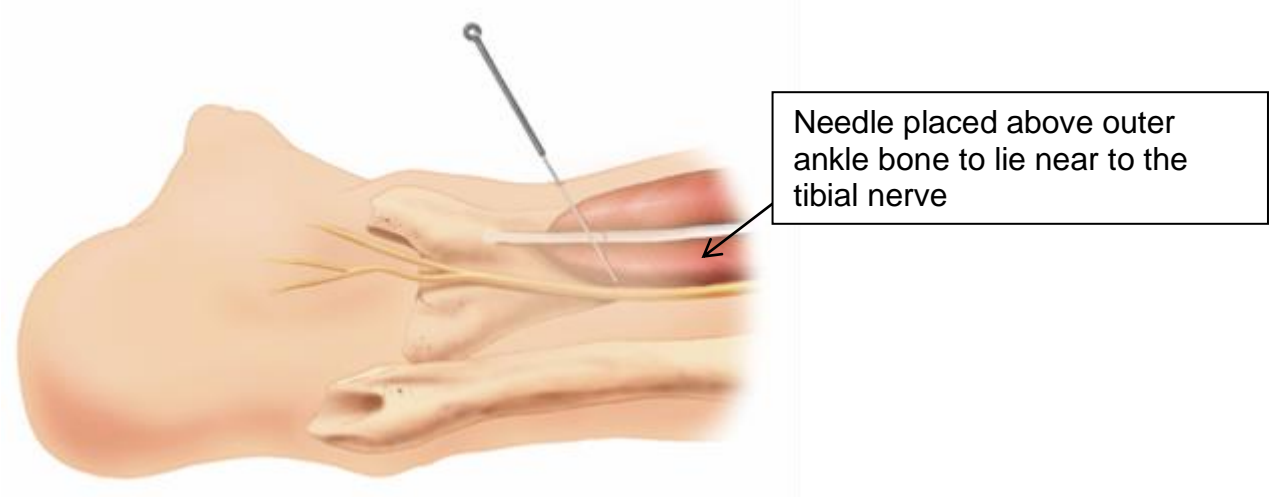
## Receiving treatment

- The stimulator will deliver 30 minutes of therapy.
- You can read, or do crossword puzzles or other similar activity during your treatment.

Figure 1. Patient undergoing Percutaneous Tibial Nerve Stimulation



Figure 2. Where the needle is placed (Image courtesy “©Uroplasty, Inc. All rights reserved.”)



## **What does it feel like?**

It is difficult to say as people respond in different ways, but most patients feel a buzzing, tingling or throbbing sensation while the stimulation is occurring.

Once the correct feeling is located the current can be turned down so that it is comfortable – it is not necessary to feel this throbbing sensation the whole 30 minutes.

## **After treatment**

The stimulator will beep upon the completion of the treatment session. Your clinician will turn off the stimulator and remove the needle electrode. You should be able to resume normal activities immediately following treatment.

## **Treatment schedule**

You will have an initial series of 12 weekly sessions lasting for approximately 30 minutes each.

As this is a relatively new treatment it is important to collect as much information about your problem both before and after the treatment. You may be asked to fill in assessments about your symptoms and the effect they have on your quality of life. You should report any side-effects you experience. This is important as this is a new treatment.

You may need to return periodically for further treatments to maintain the improvement in your symptoms.

It is very important to the success of the treatment that there are no long breaks during the initial 12 weeks of the treatment.

If you have a holiday planned it is best to delay the start of the treatment until after the holiday. It is also possible to have the treatment twice a week, so only having to attend for 6 weeks.

Please discuss any issues with appointments with your clinician.

## **Benefits**

Studies looking at the effect of PTNS show that up to 55% of patients find that their symptoms are cured and up to 90% are improved after a full course of treatment. However it may take up to 6 weeks before seeing any change. The effects wear off with time, but in patients who have top-up treatments beneficial effects are usually maintained.

## Specific risks of procedure

- The most common side effects are a little bit of discomfort or bleeding around the site of the needle insertion
- In studies there has been one report each of generalized swelling, worse incontinence, headache, blood in the urine, inability to tolerate stimulation, leg cramps, foot or toe pain, and dizziness or fainting in response to the needle being inserted.

## Treatment with the “Urgent PC Neuromodulation System” for PTNS should not be used for:

- Individuals with pacemakers or implantable defibrillators
- Individuals prone to excessive bleeding
- Individual with nerve damage that could impact either percutaneous tibial nerve or pelvic floor function
- Women who are pregnant or planning to become pregnant during the duration of the treatment

## Treatment Alternatives

### Non-surgical

- Simple behavioural changes such as drinking a total of about 1.5litres of fluid, reducing the amount of caffeine, alcohol and carbonated drinks consumed can often make a considerable difference in symptoms.
- Other behavioural treatments include bladder training, where the time between visits to the toilet is slowly increased, and pelvic floor exercises.
- Medications: These may be very effective. However, some patients do not respond to these medications or may suffer from intolerable side effects.

### Surgical

- Sacral nerve stimulation
- Intra-vesical BOTOX injections
- Major reconstructive surgery

## More information

If you would like to know more about overactive bladder and the treatments available for it, you may try the following sources of information.

- Ask your GP.
- Ask the Doctor or Nurse at the hospital.
- Look at a website such as
  - NHS choices at <http://www.nhs.uk/pages/home.aspx>
  - Patient UK at <http://patient.info/health>
  - International Urogynaecology Association (IUGA) patient information leaflet – Percutaneous Tibial Nerve Stimulation (PTNS) at [http://c.ymcdn.com/sites/www.iuga.org/resource/resmgr/brochures/eng\\_ptns.pdf](http://c.ymcdn.com/sites/www.iuga.org/resource/resmgr/brochures/eng_ptns.pdf)
  - Patient information leaflets for your own hospital and others (usually available on line)

## Acknowledgements

Dr Supriya Bulchandani, BSUG patient information committee project lead for this leaflet, on behalf of BSUG.

Making a decision - things I need to know before I commence treatment.

**Shared Decision Making**

If you are asked to make a choice, you may have lots of questions that you want to ask. You may also want to talk over your options with your family or friends. It can help to write a list of the questions you want answered and take it to your appointment.

**Ask 3 Questions**

To begin with, try to make sure you get the answers to three key questions if you are asked to make a choice about your healthcare.

1. What are my options?
2. What are the pros and cons of each option for me?
3. How do I get support to help me make a decision that is right for me?

These resources have been adapted with kind permission from the iMAGIC programmes, supported by the Health Foundation.  
\* Ask 3 Questions is based on Shepherd et al. Three questions that patients can ask to improve the quality of information physicians give about treatment options: A cross-over trial. Patient Education and Counselling, 2011;34: 279-83.

AQUA <http://www.advancingqualityalliance.nhs.uk/SDM/>

**Please list below any questions you may have, having read this leaflet.**

- 1).....
- 2).....
- 3).....

**Please describe what your expectations are from treatment.**

- 1).....
- 2).....
- 3).....