

The Oxford Pain Management Unit
Churchill Hospital

A guide to TENS

(Transcutaneous Electrical Nerve Stimulation)



Introduction

This leaflet will give you a better understanding of TENS machines and how to use one. It has been arranged as a series of questions that you may have about TENS (Transcutaneous Electrical Nerve Stimulation).

The nurses in the Pain Management Unit will show you how to use a machine and give you advice about the TENS loan scheme operating at the Pain Relief Unit.

What is TENS?

TENS has been used for many years to help relieve pain. TENS is given by a small lightweight battery-operated device. Electrode pads are placed onto the skin to deliver small electrical impulses to the nerve fibres which lie underneath the surface of the skin.

How could TENS help my pain?

The aim of TENS is to provide pain relief by blocking pain signals to the brain by the spinal cord. The electrical impulses prevent the pain messages from getting through.

TENS can also stimulate the production of endorphins; these are the natural pain relieving hormones produced by the body.

The degree of pain relief varies from person to person. There is no way of telling how well it will work until you have tried it over a few days. If TENS helps to relieve your pain it will usually only work whilst you are connected to the machine. Although it is not a cure for the cause of your pain, it may help your muscles to relax enough to bring some relief.

How do I use TENS?

- Make sure the machine is switched off before applying or removing the pads. Attach the lead wire to the electrodes. Only place the pads on clean, dry unbroken skin and make sure they are pressed down firmly. The electrodes should be placed about 5 centimetres apart, on or close to the painful area.
- If you have a small area of pain you may only need to use one on/off button and two electrode pads. If you have two separate pains or a large area of pain you may need to use both on/off buttons and four electrode pads.
- Once the lead wire has been connected to the machine the on/off buttons should be turned up slowly. This will produce a steady buzzing or tingling feeling and will help to achieve the best effect.
- The nurse will show you how to adjust the other settings on the machine. We advise you to switch the on/off buttons down or off when making adjustments.
- TENS machines usually offer three different types of sensation – constant, burst and modulation. You may prefer one sensation to another or you may want to switch between the sensations particularly if you use the machine for long periods.
- Change the position of the electrode pads each day so as not to over sensitise the skin area. Replace the pads on the backing sheet on the pads when not in use, this will help keep them sticky.

What precautions should I take?

- If you have a pacemaker or a history of unstable heart problems, do not use a TENS machine until you have discussed it with your cardiologist. They will tell you whether it is suitable for you.
- If you have metallic implants it is advisable to consult your doctor before trying TENS.
- Consult your doctor if you are planning to become pregnant. Do not use TENS during the first 6 months of pregnancy.
- Do not place electrode pads on the front of the neck or over the carotid nerve (the main pulse on your neck under your jaw).
- Do not place electrode pads over the eyes, in the mouth or anywhere internally.
- Do not use when showering or bathing.
- We advise you not to sleep all night with the TENS attached and switched on.
- We advise you not to drive whilst using your TENS machine.
- Do not let other people use your loan machine.
- Keep the TENS machine out of the reach of children.
- Care should be taken when operating machinery while using TENS.

What side effects might I experience?

There is a small risk of skin irritation from the electrode gel. Stop using the electrode pads if irritation occurs. Specially formulated electrode pads for sensitive skin can be purchased from the TENS machine supplier.

Stop using the machine if your pain becomes worse or you have any concerns about using TENS. You can seek advice by contacting the Pain Management Unit advice line or your GP. Contact the manufacturer directly if you have a query about the specific operation of the machine.

Points to remember

- Do not change your lifestyle to fit in with the machine – it needs to fit in with your life.
- TENS works best if you use it regularly when you feel your pain begin to start – don't wait for the pain to get worse. You need to use it for a minimum of 30 minutes at a time and you can gradually increase this time if it suits you. Some people with continuous chronic pain may need to use TENS all day.
- The battery used is a 9-volt or AA depending on which machine you are using. Batteries can easily be bought and should be replaced if the indicator light on the machine is not showing. Rechargeable batteries can also be used in TENS machines.

Information about the Patient Loan Scheme

You may be given a TENS machine that has been issued by Nidd Valley Medical Ltd. You will be asked to complete a form in the Pain Relief Unit agreeing to either pay for or return the machine directly to Nidd Valley Medical Ltd. within 2 weeks. You will also be supplied with a Freepost envelope and instructions on how to return or pay for the machine.

If you are over 60 years old and on low income you may be eligible for a machine through the National Benevolent Fund for the Aged. Please ask the nurse for advice if this applies to you.

Further information

If you have any questions or need further information, please telephone or email the Pain Management Unit advice line.

Voicemail advice line: **01865 857 107**

Email: **painreliefteam.ouh@nhs.net**

References:

Nidd Valley Medical Ltd

Physio-Med Services Ltd

If you need an interpreter or need a document in another language, large print, Braille or audio version, please call **01865 221473** or email **PALSJR@ouh.nhs.uk**

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