

**Patient  
Information**

# Transcutaneous Electrical Nerve Stimulation (TENS)

## Introduction

Your pain clinic doctor has prescribed TENS treatment to help treat your chronic pain. This leaflet has been produced to help you to use the machine effectively and to answer some of the commonly asked questions about TENS treatment.

## What happens next?

After your doctor has recommended TENS treatment, a member of the nursing team will give you instructions on how to use the treatment. These instructions will be tailored to your needs and pain symptoms. The machine should not be tried on other parts of the body, unless you are advised by your doctor or nurse specialist. The way TENS treatment is used and the benefits gained will differ from patient to patient.

## Benefits of TENS

- It is a therapeutic, safe and effective pain relief system
- It is non-addictive
- It is safe to use at home
- It has low running costs
- Most people can get benefit from TENS. However, it may take some people longer than others to obtain effective pain relief. You may have to experiment with the exact placement of the pads (electrodes)
- You can still take other pain relief medication if needed

## How does TENS work?

TENS is a technique for treating pain that dates back to Roman times. In the year 46AD electrical treatment (with electric eels) was used to relieve headache and gout.

Today TENS units have been found to be helpful for specific painful conditions. The units are battery operated and can be worn during normal daily activity.

Reference No.

**GHPI0541\_09\_18**

Department

**Chronic and  
Acute Pain  
Service**

Review due

**September 2021**

## Patient Information

TENS provides pain relief by preventing pain signals from reaching the brain. It can be thought of as a powerful electrical version of 'rubbing it better'. The unit, when switched on, stimulates skin nerves and produces a pleasant tingling sensation under the electrodes. This stimulation helps the body make its own pain relief chemicals (endorphins) in the spine and brain, reducing or stopping the feeling of pain.

### Using your TENS machine

The specialist nurse or Health Care Assistant (HCA) will show you how to fit and use the TENS machine.

The following items will be provided by the hospital:

- A TENS unit with leads
- A 9-volt battery
- 1 set of 4 self-adhesive re-usable pads (electrodes)
- A carry case

The TENS unit produces a safe electrical pulse that stimulates the nerves by means of 2 electrodes which stick to the skin. It is easy to operate and maintain. The nurse or HCA will show you the best place to put the electrodes.

There is also a video available on the internet, demonstrating the basics of using a TENS machine. This can be viewed at:  
[www.nhsglos.com/videos/TENSmachine/](http://www.nhsglos.com/videos/TENSmachine/)

### Starting to use your TENS

1. Make sure that all the control knobs are turned off
2. Insert the 9-volt battery into the battery compartment
3. Insert the plug end of the leads into the channel/s in the TENS machine. Place the other end of the leads into the electrodes
4. Before placing the electrodes on your skin the area should be clean and free from grease and creams
5. Place the electrodes on the appropriate area. Turn the machine on slowly by rotating the intensity control in a clock-wise direction. A light will come on. Continue to rotate the intensity control until you reach the setting that produces a gentle, comfortable tingling sensation

## Patient Information

6. If the light does not come on, this indicates that the battery needs to be replaced
7. We normally suggest that you start by using the machine for 1 hour twice a day. If the TENS helps with your pain relief it is safe to increase the time you use it. Frequently pain relief improves with time, and it is best to use it for at least 1 hour at a time
8. Pain relief varies from patient to patient, but in general, the TENS machine will only help the pain while you are wearing it. Some people do get some benefit for a short while once the machine is removed, but it is usually short lived.

Use TENS during your normal activities rather than feeling that you should only use it sitting or lying still

## Care of your TENS machine

- Do not get the TENS machine wet - do not use it in the shower or bath
- If the machine is not going to be used for some months, please remove the batteries
- Check that the plugs and pins are not warped or broken. If this happens please leave a telephone message and we will arrange replacements
- Always replace the pads on to the plastic sheet and put into a plastic bag after use. This will keep the pads moist and sticky. Do not store by heat sources such as radiators. Some people keep them in the fridge which may keep them sticky for longer
- Re-usable self-adhesive pads may be renewed by rubbing a little tap water into the gel surface

## Care of your skin

Sometimes the skin can become a little sore where the electrodes have been placed. In order to reduce the possibility of skin irritation the following steps are suggested:

- Make sure that the skin is clean before and after using the electrodes

## Patient Information

- Make minor location changes of the electrodes if irritation develops. This can be done by changing the sites on alternate days
- Make sure that the electrodes are firmly attached to the skin. If not, stimulation will be poor and you may feel unpleasant electric shocks. You may also have increased skin irritation

If the above does not relieve any skin irritation stop using the TENS treatment and contact the doctor or nurse specialist at the pain clinic.

## Cautions

- TENS treatment should not be used for any new pain without first consulting your doctor
- Never place electrodes on the front of the neck or across your heart
- Speak to your pain clinic nurse on continued use of the TENS machine if you are pregnant
- TENS should never be used by a patient with a pacemaker
- Do not place the pads over any joint replacement, such as knee or hip, or any other metalwork
- We advise that you do not use TENS while driving, if you have loose electrode contacts a sudden electrical 'twinge' might make you jerk the wheel with dangerous results
- Similarly, we do not advise you to wear the machine whilst you are sleeping in bed

If you have any questions or concerns please contact the nurse specialist using the number at the end of this leaflet.

## Troubleshooting

If your TENS machine is not working correctly, please check the battery and the position of the electrodes.

Some other possible reasons for the machine not working are:

## Patient Information

Problem	Cause	Action to take
Light not on	Flat battery	Check connection on battery, remove and replace battery
Only works now and then	Loose connection or broken leads	Check connections to machine, change leads
Electrodes not sticking	Dry adhesive	Rub a little tap water on to sticky side, replace electrodes

If all of the above fail, please call the pain clinic nurse on:

Tel: 0300 422 2976.

It is likely to go to the answer machine as the nurse may be seeing patients. If so, please leave a message and the nurse will call you back as soon as possible.

## Accessories for the machine

The hospital provides you with the loan of the machine together with electrodes and wires. We are happy to replace broken accessories within reason.

**We cannot provide replacement batteries or pads and ask that you replace the battery and pads as necessary. Re-chargeable batteries can be used.**

Replacement electrodes or pads can be purchased from most pharmacists or via the internet.

**Patient  
Information**

## Returning the TENS machine

We are always short of TENS machines so it is essential if you are no longer using the machine that you return it to the hospital. This will allow another patient to be offered this form of treatment.

We also recall the TENS machines at regular intervals, as many people still have machines that they are no longer using. When returning the machine, please fill in the return slip, which you will find on the final page of this leaflet. This should be enclosed with the machine and returned to West Block Out-patients in Cheltenham General Hospital, Gloucestershire Royal Hospital, Tewkesbury, Stroud, Cirencester or Dilke Hospitals.

If you receive a recall slip and are still using the machine please either return the slip or Tel: 0300 422 2976.

## Contact information

For any queries about your machine please contact:

### **Pain Clinic Nurse**

Tel: 0300 422 2976 (answerphone)

Please leave a message with your name, date of birth, phone number and hospital number. The pain clinic nurse will return your call at the next available opportunity to discuss your query

## TENS machine return slip

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Hospital number: \_\_\_\_\_

Date of return: \_\_\_\_\_

**Patient  
Information**

## TENS machine repair slip

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Hospital number: \_\_\_\_\_

Telephone number: \_\_\_\_\_

Content reviewed: September 2018