

Patient information

Transcutaneous Electrical Nerve Stimulation (TENS) advice for patients

What is a TENS machine?

You have been recommended a Transcutaneous Electrical Nerve Stimulation (TENS) machine for your personal use. This machine is on loan to you for a period of one month after which time it should be returned to the Physiotherapy Department. TENS is a small, lightweight, battery operated device which can clip onto your trousers or skirt allowing you to continue your daily routine. The device works with two or more adhesive pads, which are placed surrounding the site of the pain or the nerves supplying the painful area.

How does it work?

Messages are carried from a painful area through nerves to the brain. TENS is thought to work by blocking these messages on their way to the spinal cord, by stimulating the nerves that carry the sensation of touch. Therefore, the use of TENS may help to alter the pain that you are experiencing.

When TENS is of benefit, it can help you to move about more comfortably and it may allow you to reduce the amount of drugs that are required for pain relief whilst carrying out your normal activities.

When NOT to use TENS

- Do not use TENS if you have a pacemaker or problems with an irregular heartbeat
- Do not use TENS whilst driving, operating machinery or sleeping
- Do not use TENS whilst in the bath or shower or while swimming
- Do not use TENS over broken or infected skin or if the skin is numb
- Do not place TENS on the front of the neck, near the eyes or anywhere internally.

- Do not place TENS electrodes over the heart
- Do not use TENS if you have epilepsy

TENS during pregnancy is not advisable unless under strict medical supervision.

Applying the TENS electrodes

- Always make sure the machine is switched off before starting.
- Make sure the selected skin area is clean, dry and the skin is not broken or numb.
- You should also refrain from using body lotions, creams or talc to the selected area.
- Connect the electrode pads to the pins on the lead wire and place on the skin.

The physiotherapist will have given you advice on where to place the electrodes but you may find that to achieve the best pain relief you need to try a variety of electrode positions. The electrodes should be placed at least 4cm apart.

Your physiotherapist will have discussed with you the various settings on the machine. It is very helpful to “play” around with these settings as some people respond better to certain modes than others. This effect can’t really be predicted and this is why maximum benefit can be gained from trying out the various options. With that said, you may want to initially try “N” for normal mode with the frequency in the mid-range (about 100).

Initially the pulse width could be set at 200. It is worth noting that the people who benefit the most from TENS are the ones who do play around with all the various treatment parameters available on the unit.

Switch the TENS unit on. Gradually increase the intensity until you first experience a tingling sensation in and around the area of the electrodes.

Slowly increase the intensity until the sensation is strong but not painful or uncomfortable. In order for the TENS to be effective the sensation you feel must always be strong but not painful. It should not cause muscle contraction. After the TENS has been on for a while you will find that you need to turn the intensity up to keep the sensation strong.

How often should I wear TENS?

It may take up to 30 minutes to get pain relief from TENS. There is no set time that TENS may be used. Some literature suggests using it for 60-90 minutes, four times per day.

Obviously it will be most helpful to use TENs when you are experiencing pain or if you are about to do an activity which is likely to cause you pain.

When you switch the TENs off you may continue to feel the effects for up to 30 minutes.

Electrodes

The electrodes supplied with the TENs unit are self-adhesive and should last for approximately 30 applications. When not in use, you should keep the electrodes on the plastic sheet and resealed in the plastic bag. After a number of uses the electrodes will become gummy or less sticky. You should sprinkle the sticky side with water, put them back on the plastic sheet and place them in the fridge for a few hours. This will help to renew them.

To reduce skin irritation, the position of the electrodes should be varied slightly each day. It is normal to experience redness of the skin where the electrode has been but this should have resolved by the next day.

If you experience an allergic reaction to the electrodes, you should discontinue use immediately.

Finally, we recommend that you read the enclosed instruction manual.

TENs is of benefit to a significant number of patients who try it. Like all treatments, it does not work for everyone. If you have found it useful you may wish to consider purchasing your own machine. This can be discussed with your physiotherapist during one of your appointments.

If you have any further questions or concerns about the use of TENs please contact your physiotherapist on 01284 713300.

If you would like any information regarding access to the West Suffolk Hospital and its facilities please visit the website for AccessAble (the new name for DisabledGo)
<https://www.accessable.co.uk/organisations/west-suffolk-nhs-foundation-trust>

