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How Can Transcutaneous Nerve Stimulation (TENS) Help Your Patients?

Transcutaneous electrical nerve stimulation (TENS) is a therapy that uses low-voltage electrical current for pain relief. It is one of the most commonly used forms of electroanalgesia. Hundreds of clinical reports exist concerning the use of TENS for various types of conditions, such as:

- Spinal pain (includes cervical, thoracic, and low back pain).
- Myofascial and arthritic pain.
- Sympathetically mediated pain.
- Neurogenic pain.
- Postsurgical pain.

A TENS unit consists of 1 or more electrical-signal generators, a battery, and a set of elec-

trodes. The TENS unit is a small machine about the size of a pocket radio. This allows your patient to wear it throughout the day without difficulty. Typically, there are two to four electrodes (wires that conduct electrical current) from the machine to your patient's skin. The electrodes are often placed on the area of pain or at a pressure point, creating a circuit of electrical impulses that travels along nerve



fibers.

When the current is delivered, some people experience less pain. This may be because the electricity from the elec-

trodes stimulates the nerves in an affected area and sends signals to the brain that block or "scramble" normal pain signals (using the "gate control" theory of pain). Another theory is that the electrical stimulation of the nerves may help the body to produce natural painkillers called endorphins, which may block the perception of pain.

Patients that are good candidates for a TENS unit can be trained to use one in our clinic during one outpatient visit. They are instructed in the proper application of the electrodes, which are typically placed around or on the painful area, over cutaneous nerves or trigger point sites. Additionally, safety features and customizing the pulse rate and width to optimize pain relief are reviewed.

After the patient displays the appropriate understanding of their TENS unit, they leave the clinic with the unit, carrying case, instruction sheet, and electrodes.

Contraindications or precautions for the use of the TENS includes: patients who use a pacemaker or during pregnancy. The electrodes should not be applied over the carotid sinuses, eyes, anterior neck, or areas of sensory impairment.

Most insurance companies will either pay for a TENS unit or the rental of a TENS unit for your patients with a physician's prescription.

