# CONNECTICUT VALLEY HOSPITAL

# **Physical Therapy Department**

# PT Equipment Procedure # 23

Re: T.E.N.S. Pro 9000

Date: March 20, 2000 Revised: October 19, 2008

#### **Description:**

TENS Pro 9000 is a portable hand-held neurostimulator which electronically registers differences in surface skin resistance which helps locate acupoints precisely. Once the point is located, a safe, low frequency electrical stimulus is delivered.

## Indications:

- 1. Relaxing muscle spasm and releasing contracted muscles
- 2. Reducing heightened sensitivity of neural pathways
- 3. Releasing natural pain relievers called endorphins and thus providing a natural, non-toxic form of pain relief.

## **Contraindications:**

- 1. Transcutaneous Electrical Nerve Stimulation (T.E.N.S.) should not be used by patients with implanted Cardiac Pacemakers.
- 2. T.E.N.S. should not be used in the area of the carotid sinus nerves or elsewhere in the region of the front of the neck or in the mouth.
- 3. T.E.N.S. should not be used for an undiagnosed pain condition and should only be used on the advice of a medical practitioner.
- 4. T.E.N.S. should not be used with the flow of electricity occurring transcerebrally (through the head).
- 5. Warnings: Do not use gel with unit.
- 6. T.E.N.S. for use during childbirth or pregnancy should only be used after full evaluation of each case by a physician.
- 7. T.E.N.S. equipment should be kept out of the reach of children.
- 8. T.E.N.S. is a symptomatic treatment and as such does not have a curative value.
- 9. T.E.N.S. may also suppress other sensations that might otherwise serve as a protective mechanism on the outcome of a clinical process.
- 10. T.E.N.S. is not effective for pain of central origin (headache).
- 11. T.E.N.S. should be used only under continued supervision of a physician.
- 12. T.E.N.S. stimulation may cause electronic monitoring equipment to malfunction.

# **Procedure:**

1. Take the remote grounding strap and attach the strap to the patient. Wrists or ankles are commonly used sites. Be sure the metal plate on the strap is in contact with your skin.

2. Set the Tonify (+)/Disperse(-) switch as indicated. Changing this setting causes a reversal of current flow.

Do not treat the same area with both (+) and (-) currents within 12 hours of each other.

- 3. The Sensitivity dial is used to reduce the risk of skin burns. It has a range from 50K ohms to 10M ohms with a reading at mid position of 1.5M ohms.
- 4. Begin with this control set at mid position and proceed to steps 4,5 and 6. If the sound pitch and the light do not change, turn the sensitivity dial toward "dry" and repeat steps 4-6. If the sound stays at a high pitch and the light stays out over large areas turn the sensitivity dial toward "wet" and repeat steps 4-6.
- 5. Hold the unit as one would a pen with the light and audio outlet towards the therapist. Have one finger ready but not depressing the Stim Button. This is the large button just above the words Stim.
- 6. Switch the unit on by moving the on-off button to on.
- 7. Move the probe point slowly over the skin using sufficient pressure to maintain skin contact but not hard enough to "drag" on the skin. Do not "jab" at the skin. It may help to have the skin on the stretch to allow the probe to move more freely.

Listen for a rise in sound pitch and watch for the light to flicker. When the sound reaches its highest pitch and the light goes out, the risk of skin burns is low. Apply more pressure until you feel the probe will not slip off. The pressure should not be painful.

8. Press the Stim button for between 15-30 seconds. Repeat steps 6 and 7 in each area to be stimulated.

Stimulation may be given up to 3 times a day initially, and frequency reduced as improvement occurs.

- 9. TENS Pro 9000 machine is cleaned as per Physical Therapy Cleaning Procedures.
- 10. TENS Pro 9000 machine receives Biomedical Testing annually in January of each year.