

Naeser Laser Home Treatment Program for the FOOT Peripheral Neuropathy and Poor Circulation in the Foot Treated with Laser Acupuncture and Microamps TENS -

Teaching Module Abstract presented at the 3rd Annual Meeting of the North American Association for Laser Therapy (NAALT),
Uniformed Services University for the Health Sciences, Bethesda, MD, April 4, 2003. www.naalt.org

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May be used with peripheral neuropathy (of diabetic, AIDS, or neurological origin) or poor circulation to the feet, including foot ulcers. (AIDS patients taking certain medications can develop serious, painful, peripheral neuropathies in the ankles/feet.) This protocol could also be tried with stroke patients or M.S. patients with mild ankle dorsi-flexion problems ("foot drop"). It can also be used with spinal cord injury patients who have cramping and spasticity in the leg and foot muscles.

Treat 3-6 times per week. This protocol includes *both* microamps TENS and red-beam low-level laser. No medical claims are made.

Some lasers which have been used include:

Red-beam Lasers (for shallow acupuncture points).

Lasotronic Pocket Therapy Laser, 45 mW, 660 nm, CW. Elliptical beam, 1.5 mm x 3.5 mm.
Beam spot size: 0.0412 cm². 1 Joule/cm² = .915 sec. or 1 sec. 4 Joules/cm² = 4 sec.

Ito Laser Pointer, 5mW, 670 nm. CW. Aperture: 5 mm diameter.
Beam spot size: 0.196 cm² 1 Joule = 200 sec. 1 Joule/cm² = 39.2 sec.
4 Joules/cm² = 156.9 sec. or 2 Min. 36 sec.

Infrared Lasers (for deeper acupuncture points).

Respond 2400XL Laser (Now, Luminex), 500 mW, 904 nm, CW. Aperture: 1.14 cm diam.
Beam spot size: 1.03 cm² 1 Joule = 0.5 sec. 1 Joule/cm² = 2 sec. 4 Joules/cm² = 8 sec

Microamps TENS Device:

MicroStim 100 TENS (580 μ A to 3.5 mA) with 2 circular electrodes, where each electrode has a copper-coated surface, with four embedded, tiny, red LEDs (not laser light).

MicroStim 100 TENS Device (A TENS device may not be used with a patient who is pregnant, nor with a patient who has a pacemaker.)

1. Be sure the foot and toes of the patient are clean and dry; no perspiration or body lotion, etc. Wipe the areas where the acupuncture points are located with an alcohol pad. See Diagram on last page.

2. Set switch to the "square wave" on the MicroStim 100 TENS device.

3. There are 2 circular electrodes, each has a copper-coated surface, with four embedded, tiny red LED lights. Place one double-sided sticky CLEAR circular conducting patch onto the copper surface of each circular electrode.

4. Place one circular electrode with attached sticky patch, onto the top of the foot at Liv 3. Place the second circular electrode with attached sticky patch on the sole of the foot at Ki 1. See Diagram. Place this second circular electrode so that the two circular electrodes are placed opposite to each other, to enable treatment through the foot with the MicroStim 100 TENS device.

5. Set the frequency switch on the top of the MicroStim 100 TENS to F4 (292 Hz) for the first frequency to use.

6. Turn the round power control knob to "On," and SLOWLY turn up the power until the patient reports feeling a "tingling sensation" from either electrode which is in place. Now, turn the power down, until the PATIENT DOES NOT FEEL ANY STIMULUS AT ALL. This will be the correct setting (it should be around only 2 or 4 on the round power control knob). If the patient does not report any tingling sensation at all, even at the highest setting of 9, this is OK and just set the power to maximum. Leave the power setting at this subthreshold level, for 2 minutes.

7. After the first 2 minutes at F4, switch the frequency knob over to the lowest frequency setting of F1 (0.3 Hz) for 18 minutes. The MicroStim 100 TENS device turns itself off after 20 minutes. Discard both circular sticky patches; do not store the used patches on the LED surface, this would corrode the copper; do not re-use the sticky patches after one use. The total time required for the MicroStim 100 TENS treatment is 20 minutes.

Low-Level Laser Treatment

While the microamps TENS treatment is ongoing, a red-beam laser can be used to treat the Jing-Well points near the base of the toenail beds, and other points on the foot, at an energy density of 4 J/cm². The tip of the laser pointer should physically touch the skin, but do not press so hard that the tip leaves a very deep indentation on the skin. Hold the laser pointer at a right angle to the skin. These acupuncture points include:

1. Sp 1, Liv 1, St 45, GB 44, Bl 67. These are the most important points; others are optional. See Diagram on last page.

2. Points in the web spaces between the toes.

3. Ki 6, Sp 5, Liv 4, St 41, GB 40; Ki 3, Bl 60; and/or other shallow ankle and foot points. These points are optional. They are located around the ankle. See an acupuncture textbook for their locations.

4. Use the red-beam laser only on shallow points, on adults.

5. The 5 mW red-beam laser may be used at increased J/cm² (8 J/cm²), as necessary, on very painful joints/areas.

6. It is, of course, recommended that acupuncture needles or infrared laser also be used to treat other deeper acupuncture points on the leg, as appropriate, on adults.

7. The patient can perform this treatment on him/herself once a day, or every other day, until there is stable pain relief (or reduced spasticity over several days); then the treatments can be used only as necessary.

8. For cases with leg cramping and spasticity (especially spinal cord injury cases), also consider the use of a magnet cap developed by Agatha Colbert, M.D. The magnet cap appears to affect GV 20 and SiShenCong, reducing spasticity in the legs and reducing stomach spasms in spinal cord injury patients (Naeser, personal observation). The magnet cap may be purchased through Jayne Ronsicki, Lic.Ac., Hudson, MA. Silverbog@aol.com 1-877-527-1550 or 978-562-6389.

Steve Liu, Lic.Ac., Tucson, AZ has experience using this (or a similar) FOOT treatment program combining red-beam laser on acupuncture points and microamps TENS, in treatment of diabetic peripheral neuropathy (Liu, 2002 and personal communication). steveliu@hlahc.com

References

Liu, S. 2002. Treatment of Diabetic Peripheral Neuropathy with Low Power Laser Acupuncture. Poster presentation at the Society for Acupuncture Research Meetings, Seattle, Washington, October, 2002.

Naeser MA, Wei XB, Laser Acupuncture - Introductory Textbook for Treatment of Pain, Paralysis, Spasticity and Other Disorders, Boston, Boston Chinese Medicine, 1994, p. 41. Available through sales@spanda.com

The American Association of Oriental Medicine (AAOM) maintains a list of Lic.Ac.'s who use Laser Acupuncture: 1-888-500-7999 www.AAOM.org

Websites: <http://gancao.net/ht/cts.shtml> (carpal tunnel syndrome, photos show some devices)
<http://gancao.net/ht/laser.shtml> (some general laser acupuncture information)

Some sources for devices mentioned here:

Lasotronic Pocket Therapy Laser, 45 mW, 660 nm. May be discontinued, contact: felix.kramer@gmx.ch

Ito Laser, 5mW, 670 nm, Lhasa Medical, Weymouth, MA 800-722-8775, www.LhasaMedical.com
\$118.00, replace two AAA batteries after three hours of use. If 2 lasers purchased, cost \$112/laser.

Luminex Laser (Formerly Respond Laser), 500 mW, 670nm, 867 nm, 904 nm. Medical Laser Systems, Branford, CT 800-778-0836, Doreen@medicallasersystems.com www.medicallasersystems.com

Thor Lasers. Variety of laser cluster heads and single probes, red-beam and infrared. Melyni@ntelos.net
www.Thorlaser.com Phone: 540-942-4500 188 Sherwood Dr., Waynesboro, VA 22980

MicroStim 100 TENS unit with 2 circular electrodes. MicroStim, Inc., Tamarac, FL. 1-800-326-9119 or (954) 720-4383. Developed by Joel Rossen, DVM. jrossen@MicroStim.Com info@microstim.com
Price: \$395.

