

INSTRUCTION

Segmental Release Therapy: Trigger Point Needling for Physical Therapists

By
Mark D. Seem, Ph.D., Lic.Ac., Steven J. Finando, Ph.D., Lic.Ac., and Joseph Weisberg, Ph.D., P.T.

A New Opportunity for Physical Therapists

Recently the New York State Board for Physical Therapy ruled that needling of trigger points was within the scope of physical therapy practice, and that physical therapists could be trained in trigger point needling. Trigger point needling produces rapid myofascial release, and proper training results in an extremely safe and effective practice. Segmental release therapy is a special application of trigger point needling designed specifically for physical therapy practice.

Principles of Segmental Release Therapy

B.J. Headley (1990) carefully evaluated patients with low back pain and found the existence of a distal "myofascial chain" in the lower extremities. This concept takes the concept of trigger points beyond the notion of local neural hyperirritability. It is the notion of a "myofascial chain" that provides an important link in understanding the principles of segmental release therapy (SRT).

Clinical and teaching experience has resulted in a re-thinking of the nature of acupuncture points. It has become clear that acupuncture points refer to general sites in the myofascial territory that are *predisposed to hyperactivity*, and that acupuncture meridians or channels refer to interrelated myofascial segments and chains which are *predisposed to dysfunction synchronously*.

In other words, acupuncture points were traditionally meant to provide a means of *imaging* myofascial dysfunction. The points were approximations of common areas of trigger point activity, while the associations of points, called meridians, described myofascial chains that described various dysfunctions. In her study of low back

patients, Headley (1990) employed extensive static and dynamic EMG evaluations in conjunction with comprehensive soft tissue evaluation for trigger points and referred pain patterns. She describes a myofascial chain in the lower extremity that extends from the piriformis and anterior pectineus, through the tensor fascia lata and biceps femoris, and down to the gastrocnemius and soleus. This corresponds precisely to the lower back and lower extremity segments of the dorsal and lateral zones described by segmental release therapy. It also coincides with various levels and branches of the bladder and gall bladder meridians in acupuncture.

In segmental release therapy, palpation for sensitive trigger points is performed by evaluating the dorsal, lateral, and ventral myofascial zones. The distinction between primary, secondary, and satellite trigger points made by Travell and Simons (1983) is unnecessary for the technique. The aim is to identify the entire series of segments and chains involved. These tender points are all deactivated by insertion of fine needles until a characteristic "jump-sign" or sensation is achieved. Needles are then left in place for 10 to 20 minutes, as is done in acupuncture. Recalcitrant points are restimulated every five minutes by slightly lifting and reinserting the needle into the trouble spot at various angles until the release is observed. Leaving the combination of needles in place for 10 to 20 minutes leads to induction of the relaxation response by release of endorphins, well documented in acupuncture practice. This relaxation response facilitates the deactivation of myofascial constrictions, and often results in a sense of lengthening and softening of these areas with an associated increase in mobility. Such relaxation also overshadows any mild

(continued on page 18)

Suffern, NY
Rockland County

*Contribute to our
continuing success!*

Growing P.T. owned private practice needs a full-time physical therapist in our newly renovated Suffern office. Should be motivated, innovative, versatile, dynamic & personable. Your energy and excellent clinical skills are needed to continue the growth of this office. We offer a highly competitive salary and benefits package.

Join our progressive, active, expanding multi-office practice.

* * * * *

Please send your resume to:

Ellen Breger, M.A., P.T.

*Rockland
Physical Therapy
Service*

311 North Midland Avenue
Nyack, New York 10960

(914) 358-8883

INSTRUCTION

CALENDAR OF EVENTS

October 5, 1991
**THE SURGICAL
INTERVENTION AND
REHABILITATION OF
THE POST OPERATIVE
BACK PATIENT**

Sponsored by North Shore University Hospital Physical and Occupational Therapy Department. Emphasis will be placed on the surgical intervention and rehabilitation management of patients with disc disease, spinal stenosis and spinal instability.

For further information contact:
Barbara Silvestri, M.S., P.T. ·
(516) 562-4710

HEALTH ADVANTAGE PRODUCTS, INC.

Specializing in the
Distribution of
Physical Medicine &
Rehabilitation Products

Call and ask us about:

- Personal Service
- Competitive Pricing
- MICRO-CURRENT
- Department Planning
- Leasing
- Product Variety

Phone
(718) 575-3272

Suite 340 · 110-64 Queens Boulevard
Forest Hills · New York · 11375

Trigger Point (continued from page 16)

discomfort the patient may have experienced on needle insertion. The needles are extremely fine (34-36 guage, one to one-and-a-half inches long) and are generally inserted no more than one-half inch in depth. By educating patients about the myofascial interaction involved, they clearly understand their part in the dysfunction and are motivated to change.

While it might be said that Headley's (1990) research describing a trigger point zone and its related myofascial chain is a reinvention of a concept that has been proven in acupuncture over the last two millenia, it actually is an important type of research that confirms a simple Oriental physical therapy concept: "treat upper and lower, right and left, front and back" myofascial zones. Segmental release therapy includes evaluation of the ever-present myofascial chain, similar to that described by Headley in low back pain patients, and described by Gunn (1989). (These distal sets of trigger points and myofascial constrictions will generally follow the pattern of the large acupuncture meridian networks, re-defined in SRT as the dorsal, lateral, and ventral zones.)

Mark D. Seem, Ph.D., is a licensed acupuncturist practicing in New York City, and is a founder and director of the Tri-State Institute of Traditional Chinese Acupuncture. He is a former commissioner on the National Commission for the Certification of Acupuncturists.

Steven J. Finando, Ph.D., a licensed acupuncturist practicing in Roslyn Heights, Long Island, is a former director of research and a graduate research faculty member at two universities, and is a former chairman of the National Commission for the Certification of Acupuncturists.

Joseph Weisberg, Ph.D., is Dean of the Barry Z. Levine School of Health Sciences at Touro College. He is internationally known for his research in physical

(Continued on page 20)

ATTENTION!

Phonophoresis and Iontophoresis Users

If you are interested in a more economical alternative source for your phonophoresis and/or iontophoresis needs.... Call for a free brochure.

The Delsone Company, Inc., supplying the phonophoresis and iontophoresis needs of therapists since 1982.

The Delsone Company, Inc.

Daniel Ben-Amoz, Pharmacist
Post Office Box 54, Clifton Park, New York 12065

Phone: (800) 621-4007 Fax: (518) 383-6063

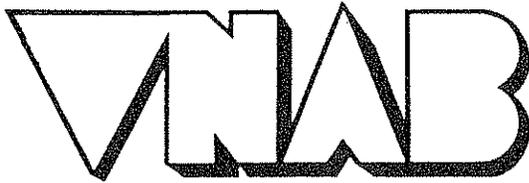
INSTRUCTION

BROOKLYN, NEW YORK

PHYSICAL THERAPISTS

FEE FOR SERVICE - \$42.00 PER VISIT

Immediate opportunities exist for you at our well-known certified home health care agency. We are the oldest in New York City and provide a full range of professional services. We can offer you flexibility and the opportunity to practice independently. Requirements include New York State license with one year experience in a medical setting. Home care experience preferred. For further information and appointment, please contact the Employment Coordinator at (718) 230-6941, or send your resume to:



VISITING NURSE ASSOCIATION OF BROOKLYN, INC.
138 South Oxford Street * Brooklyn, New York 11217

Trigger Point (cont'd. from page 16)
therapy and is an expert in trigger point therapy.

References

Gunn, Chan C., *Treating Myofascial Pain: Intramuscular Stimulation for Myofascial Pain Syndromes of Neuropathic Origin* (Seattle: University of Washington Medical School, 1989).

Headley, B.J., EMG and myofascial pain, *Clinical Management*, Vol. 10, No. 4, July-Aug., 1990, 43-46.

Travell, J.G., and Simons, D.G., *Myofascial Pain and Dysfunction: The Trigger Point Manual* (Baltimore: Williams and Wilkins, 1983).

Quality
products for pain management supported by local professional salespeople.

1-800-777-8367

A Division of Henley International, Inc.
An American Stock Exchange Company

- IsoWave
- Jeltrode Electrodes
- Home Fluidotherapy
- Medipad
- EMS 8100
- Carpal Tunnel Glove

NIRON

104 Industrial Blvd.
Sugar Land, TX 77478



Adirondack Medical Center

EMERGENCY PHYSICIAN

LAKE PLACID & SARANAC LAKE, NEW YORK

Looking for Emergency Medicine Physician to work in two emergency rooms with 12,000 and 7,000 visits per year. Would join hospital-based 1 Emergency M.D. and 7 Physician Assistants Group. Would prefer EM Training, but would consider FP, IM, General Surgery BP/BC. Must have ACLS, ATLS.

The region is the home of the new U.S. Olympic Training Center, site of the 1932 and 1980 Winter Olympic Games and the location of many annual World Cup events, all outdoor. Can participate in helicopter and Medevac Care developed for entire Adirondack Region. Flexible scheduling allows plenty of time to fully enjoy the country's largest wilderness park year round. All outdoor sports including hunting, fishing, boating, climbing, camping are easily accessible. The resulting concentration of sports medicine and trauma cases provides for an interesting practice. Opportunity exists to participate in a unique Backcountry Rescue Program.

Excellent salary and benefit package. Full-time or part-time position available. Possible Directorship available in future.

Send CV to Michael Pond, M.D., Adirondack Medical Center, P.O. Box 471, Saranac Lake, N.Y. 12983.