www.post-polio.org

## **Every Body Benefits from Massage**

Leslie Drawdy, PT, DPT, CLT-LANA, Tucson, Arizona, Ieslie@drawdyonline.com



Leslie Drawdy

assage is known to have many general health benefits, including decreased stress and anxiety, increased blood flow, decreased blood pressure, decreased pain and stiffness. Certain techniques can also result in decreased edema and hypersensitivity. Many people with post-polio syndrome (PPS) suffer from pain, cold intolerance and hypersensitivity. Most research and books on PPS management simply state that massage may be helpful in managing these symptoms; however the medical literature lacks more specific information.

### Clinical Approaches to Massage:

Traditionally, deep tissue massage or Swedish massage are the methods of choice for improving blood flow, decreasing muscle spasm and promoting muscle relaxation. However these techniques can produce pain for several days afterward. This can cause decreased function for certain individuals with PPS while the muscles are recovering. Other techniques can be just as effective.

For example, the strain counterstrain (SCS) method of manual therapy is often very effective, and easily taught to a patient and/or spouse/partner. Although it sounds painful and aggressive, it is actually quite the opposite. The therapist places the limb in the most relaxed position to mechanically reduce the stress on the muscles in question, and then uses light manual pressure specifically at the sites of spasm or palpable soft tissue abnormality to get the muscle to relax. This type of therapy actually retrains the muscle and can have a longlasting effect.

Physical therapists, occupational therapists and massage therapists all use massage for different purposes in their practice. Massage therapists are certainly the experts in different massage techniques and are able to devote their time to relaxing the whole body. They can concentrate more of their efforts on the body part you request them to, but they are also able to address all the muscle groups and improve the whole body fluid flow.

Physical and occupational therapists use specific soft tissue mobilization techniques to promote pain relief and improved muscle function as it relates to specific mobility issues and edema management. If you have significant amounts of ongoing pain and muscle tightness, one recommendation might be to have massage therapy to address the pain and muscle tightness, and also have physical or occupational therapy to correct the underlying mechanical problems that are causing your continued symptoms.

continued, page 8

#### Guidelines for home massage

Massage doesn't have to be performed by a professional in order to be helpful. Generally speaking, if it feels good, it is okay. If your spouse is massaging your legs, for instance, give him/her specific feedback about what feels good and what doesn't. It's always a good idea to start with lighter pressure, and then ask them to increase the pressure as you feel it is necessary. Massage does not have to hurt to be beneficial. For increased blood flow and muscle relaxation, moderate pressure is often very effective without producing painful side effects.

Using a heat pack prior to massage may help to relax the muscle, making the massage a little easier. The more fully the hand is in contact with the area to be massaged, the more relaxing the massage will be. Digging in with fingertips can cause stress and hand pain for the person performing the massage and can be irritating to the recipient. Applying pressure through the heel of the hand is better.

If you have a muscle spasm or trigger point, holding constant pressure to the area is the best way to relax it. This is referred to as trigger point therapy. The mistake most people make is to dig their fingers into the area of spasm and rub back and forth. This can be very irritating and cause more pain as well as actually aggravate the spasm and cause the surrounding muscles to tense. Start lightly, and gradually increase the pressure until the trigger point relaxes. Take intermittent breaks, or alternate between areas of spasm. Once the spasm is relaxed, perform gentle, even strokes to the general area with the heel of the hand.

Although typically not as relaxing or easy to do, self-massage can still be helpful. It is important to listen to your body's feedback. Don't be too aggressive. Try to find the most relaxed position you can. You don't want to increase your pain or muscle tension in your arms and neck while massaging your foot! The same principles and techniques of massage with a partner apply here.

Self massage can be performed whenever you feel you need it. Many of my clients initially perform home massage daily, and then decrease the frequency as their pain improves. The best parameter is to listen to your body.

# Concerns/issues and modifications

There are some circumstances in which massage must be performed more carefully. Limbs with chronic edema, hypersensitivity, fragile skin, open wounds, or diabetic neuropathy must be approached a little differently. Aggressive massage may be intolerable and could cause more problems. In these

### **Choosing a physical therapist**

It can be difficult to find the right physical therapist. If you cannot find a therapist who has knowledge and experience in treating PPS, look for a therapist who is familiar with neurological/neuromuscular disorders, preferably with experience treating multiple sclerosis patients.

Start by asking others you know with PPS who have had successful physical therapy.

If a therapist has a good understanding of multiple sclerosis, they already know the basic treatment principles for post-polio syndrome, whether they are aware of it or not! You're most likely to find a qualified therapist in a hospital-based outpatient therapy clinic.

If your function has declined to the point that leaving your home for an appointment completely wears you out and you are avoiding activities outside your home, you may qualify for home health therapy services. Most home health therapists are qualified to treat patients with PPS, since they see a wide variety of complicated diagnoses and situations. This would be an excellent place to start if you are finding that you need increased help with your activities of daily living and general mobility in your home.

PHI's online *Post-Polio Directory* (www.post-polio.org/net/PDIR.pdf) includes the names of physical therapists. If you are a therapist and wish to be listed, or if you know a therapist who should be listed, please contact info@post-polio.org.

Research

### **PHI Announces Research Grants for 2011**

Joan L. Headley, Executive Director, Post-Polio Health International (PHI), director@post-polio.org

Teams from the Departments of Physical Medicine and Rehabilitation at the Hadassah Medical Center, Jerusalem, Israel, and at the University of Michigan, Ann Arbor, Michigan, were awarded \$25,000 each from The Research Fund of Post-Polio Health International for research to be conducted in 2011.

Zeev Meiner, MD, will lead the study, "Characteristics of poliomyelitis and post-polio patients among Jews and Arabs in Jerusalem." Demographic, medical, socioeconomic, occupational and functional data will be collected on 250 polio survivors (Jews and Arabs) and will be compared to the age and gender-matched "nonpolio" population to determine the extent of post-polio problems and to develop programs to prevent further problems. Dr. Meiner will be assisted by Isabella Schwartz, MD, head of the post-polio clinic established in 1997 at the Hadassah Medical Center.

Survivors in the study will be evaluated according to the March of Dimes criteria, and post-polio syndrome severity will be evaluated according to the IPPS (Index of Post-Polio Sequelae). Fifty survivors will receive group or individual therapy twice a week for six weeks to evaluate the effectiveness of specific rehabilitative therapies. Dr. Meiner's team also includes Irina Gartsmn, MD, (Physical Medicine and Rehabilitation), Yechiel Friedlander, PhD, and Orly Manor, PhD, in the Hebrew University Braun School of Public Health Biostatistics and Epidemiology Department.

Claire Z. Kalpakjian, PhD, MS, is the principal investigator for "The Role of Oral Glutathione in Improvement of Health Outcomes among Persons with Late Effects of Poliomyelitis." The critical role in a number of cellular processes of glutathione, a powerful antioxidant, is suggested, but there is little published data about its effectiveness.

The study conducted at the University of Michigan will examine the effect of oral glutathione supplementation on subjective measures, such as fatigue, physical function, sleep and emotional distress, and on objective measures of physical activity, sleep efficiency and functional mobility. Twenty individuals between the ages of 50 and 65 will have blood drawn on the first and last of four data collection visits to measure glutathione levels. Participants will be recruited from the University of Michigan outpatient clinics and the Michigan Polio Network. Mark. J. Ziadeh, MD, Assistant Clinical Professor in the Department of Physical Medicine and Rehabilitation is co-investigator.

cases, a very light technique is helpful. It can be relaxing and pain relieving and may even be helpful with edema management.

The best technique in these situations is one similar to the Manual Lymph Drainage technique used for lymphedema patients. Starting at the top of the affected limb, using full contact with the palm and fingers of the hand, apply enough pressure only to stretch the skin. Gently pull the skin toward the top of the limb. Then move your hand down a bit on the limb and repeat, working your way down to the end of the limb. This technique is helpful with multiple types of swelling, and has been very successful in

reducing hypersensitivity. If you struggle with either of these issues, I would recommend getting a referral to a lymphedema therapist or seeing a massage therapist who is trained in lymphedema management. They can teach you and your partner exactly what to do. It is very easy to learn, but it is a little different for each person.

If the skin is very fragile or there is an open wound on the limb in question, use caution. Keep the skin well moisturized, and never apply direct pressure over the site of a wound. However very light massage over areas of intact skin can still be performed. Simple, light stroking of the skin without any application of pressure, or the

lymphedema technique described above can be used safely.

If you have diabetic neuropathy, you must keep in mind that your sensation is altered. You may not be able to accurately assess whether the amount of pressure during a massage is okay. Light to moderate pressure is best to avoid any soft tissue damage.

Don't be afraid to seek professional advice! If you have any concerns or struggle with any of the specific issues listed above, one or two visits with a professional for instruction on the correct massage method for you may be well worth it.