Jian Shen

School of Tai Chi Hobart

Possibly one of the few Tai Chi Schools in Australia which is supported by a City Council, Jian Shen meets in the rose gardens of Glenorchy City Council each Monday, Wednesday and Friday at 8.00am for an early morning session during most of the year and then moves to a Council hall for those months when the cooler weather prevails.

Founded by Bill Pearson the School is regularly invited to perform at various occasions and appears annually at the Cygnet Herb Fair, performed for the delegation from the China Academy of Chinese Medicial Sciences and most recently appeared for the Natural Medicine and Therapies Registration Board meeting held in Hobart.

Next year the School will be traveling to Beijing for an intensive weeks training in Tai Chi and Qigong at the Beijing Institute of Sport.

Photos from the top show students with the delegation from the China Academy of Chinese Medical Sciences; a class with Adult Education in Hobart and in the rose gardens in Glenorchy. For further information ring: 0409 972 668.

CONFUCIUS DIDN'T SAY.....

- Whoever leaps off cliff jumps to conclusion.
- Whoever runs in front of car gets tired.
- Whoever runs behind car gets exhausted.
- Whoever eats many prunes get good run for money.
- War does not determine who is right. It determines who is left.
- Whoever drives like hell is bound to get there.

Clinical Orthopedic

By Dr Joe Muscolino

Clients seek out massage therapy for many reasons. Sometimes it is for simple human touch; other times it is for relaxation. However, in recent years, clients are increasingly turning to massage therapy to help remedy their musculoskeletal complaints. Performing massage toward this end can be called clinical orthopedic massage therapy (COMT).

Fundamentals

It might seem that the world of continuing professional education (CPE) for COMT offers a dizzying array of treatment technique options. But when we look a little closer, we see that most of these techniques are variations of a few fundamental treatment approaches. The four fundamental treatment approaches that form the foundation of COMT are hydrotherapy, soft tissue manipulation strokes, stretching, and joint mobilisation. Following is a brief overview of these fundamental components.

Hydrotherapy

The term hydrotherapy literally means water therapy (hydro means water), and was named because water is used to apply hot and/or cold therapy to the client. Although water is not the only means of transferring heat and cold, the term hydrotherapy is generally used as a blanket term for all techniques that involve hot and cold. Cold hydrotherapy (also known as cryotherapy) usually involves the use of ice or ice packs and has anti-inflammatory and analgesic effects (Figure 1). Ice is an anti-inflammatory that decreases swelling because it causes vasoconstriction of local arteries; and it is an analgesic that decreases pain because it can numb pain receptors in the region of application. Heat hydrotherapy acts to relax and loosen musculature and other soft tissues where it is applied. Heat accomplishes this both by relaxing nervous system control of muscle tone and by loosening fascial tissues.

There are a number of options when it comes to hydrotherapy application for orthopedic work. Cold can be used to numb a region before deep tissue work is done. By lessening sensitivity, the client will likely allow deeper pressure to be used than otherwise might have been comfortable or possible. Cold can also be used after deep tissue work to decrease swelling that might already have been present, or to prevent swelling from occurring that might result from the deep pressure. Although heat can be used to "soften" taut tissues before engaging in deep tissue work, it is especially valuable to use heat before stretching or joint mobilisation is performed.

Soft Tissue Manipulation

The second fundamental treatment technique approach is soft tissue manipulation. Soft tissue manipulation is a broad term that can be used to incorporate most all types of hands-on massage strokes. These include cross-fiber, compression, and deep stroking, to name a few. The benefits of each stroke vary depending upon the condition being treated and the individual preferences of the client receiving the work. What is common to all these strokes is the introduction of pressure into the client. Although deep pressure is not always the appropriate or best treatment option for every condition or every client, it is an extremely valuable tool for the clinical orthopedic massage therapist. When called for, it is critically important that we can generate deep pressure without excessive effort. Fundamental to this is the quality of our body mechanics.

There are many aspects to optimal body mechanics; however it is likely that the most important one is generating pressure from our core (trunk and pelvis). To accomplish this, our core must be positioned behind and in line with the stroke.

When we are standing and pressing into the "top" surface of the client (the body surface that is oriented toward the ceiling), we need to place our trunk over the client; this requires the height of the table to be low so that the client is literally under us (Figure 2). A good guideline is to have the top of the table at the height of our knee. Of course, if we are using our elbow or forearm as a contact, the table can and should be higher. Electric lift tables are not only convenient, they are extremely valuable because they allow us to optimize the table height by simply pressing on a foot pedal. This allows for optimal quality of work throughout the session, which translates into therapeutic success.

When we are seated and working the supine client's neck, positioning our core behind the stroke involves laterally rotating the arm at the glenohumeral joint and placing our elbow inside our anterior superior iliac spine (ASIS). We then generate pressure by leaning in from our core. This core pressure translates through our forearm, hand, and then into the client (Figure 3).

Stretching

The third fundamental approach of orthopedic work is stretching. When appropriately applied, stretching is a critically important aspect of our orthopedic massage session. Because it is most effective when the client's tissues are already warmed up, stretching is best performed after heat and/or massage are done. Logistically, this means that stretching is usually incorporated into the treatment toward the end of the session. There are a number of different stretching protocols that can be done. Common to all stretching techniques is that soft tissues are lengthened. This can aid in relaxing muscle tone and breaking up soft tissue fascial adhesions.

In addition to the physical lengthening component of stretching, advanced stretching techniques utilize an additional component; they add a neurologic inhibition that relaxes muscle tone. The generally

Massage Therapy

accepted basis for contract relax (CR) stretching (also known as post-isometric relaxation [PIR] stretching or proprioceptive neuromuscular facilitation [PNF] stretching) is inhibition of musculature due to the Golgi tendon organ reflex. Agonist contract (AC) stretching (the basis of Aaron Mattes' active isolated stretching [AIS] technique) is based upon the reciprocal inhibition reflex (Figures 4 and 5)

Joint Mobilisation

The fourth fundamental treatment approach of clinical orthopedic massage therapy is joint mobilisation. Joint mobilisation is rarely utilized by massage therapists. This is unfortunate because when appropriately applied, especially to the spine, it is such a powerful and effective treatment tool. In essence, joint mobilisation can be looked at as a very specific and focused form of pin and stretch technique. Using the neck as an example, we pin (stabilize) one vertebra, and then we move the vertebra above (along with the rest of the cervical spine above and the head) relative to it. This directs the stretch to the specific segmental joint level that is located between them (Figure 6). Joint mobilisation is extremely important because no other stretching protocol can target a specific joint level of the spine. All other stretching techniques (including neural inhibition stretches) apply their stretching force across the entire region of the spine where they are being employed. Consequently, if one joint level is tight (hypomobile), then adjacent joint levels usually compensate by increasing their motion (becoming hypermobile). Because these hypermobile levels increase their motion, the tight joint level can avoid being stretched.

Joint mobilisation stretching is very specific so we use only a very small range of motion to apply the stretching force; and we apply the mobilisation stretch for only a second or less. It is critically important to point out that no thrust is introduced during joint mobilisation. Doing so would constitute a high velocity joint manipulation that is not within the scope of massage therapy. Joint mobilisation is always applied slowly and evenly.

Putting It All Together

Competent COMT involves many things. First, it requires that we possess assessment skills and the critical thinking necessary to apply them to form an accurate assessment of the client. Next, we must have a tool box of treatment techniques that we can use to treat the client, along with the critical thinking needed to choose among these treatment tools. As a rule, our treatment should always be specific and tailored to the client who is on the table; treatment should never be applied in a cookbook manner. However, it is generally wise to follow the following guidelines: When we are looking to loosen taut soft tissues (including tight musculature) with orthopedic work, use a combination of heat, massage, stretching, and joint mobilisation. Further, the best order to apply these techniques is heat and/or massage first, followed by stretching and then joint mobilisation.

Acquiring New Skills

If you do not currently utilize stretching (especially advanced stretching techniques) and joint mobilisation, you may want to consider adding them to your practice. However, as with all new techniques, it is best to become proficient with them before trying them out on your clients. Although these techniques can be learned from books and journal articles, learning from a video presentation, or even better, an in-person hands-on workshops with personal attention by a skilled instructor is recommended for advanced stretching techniques. Because joint mobilisation is so precise and has such powerful effects, it is especially important to attend hands-on workshops when first learning this skill, and then having video instruction to reinforce this newly learned skill. The addition of these tools to your therapeutic tool box will increase not only your therapeutic success, but the success of your practice as well!

Figure legends

Figure 1. A Cryocup® is an excellent way to apply cold therapy (cryotherapy).

Figure 2. The table needs to be low when applying deep pressure to the client's back.

Figure 3. Placing the elbow inside the anterior superior iliac spine (ASIS) allows for pressure generated from the core to translate through the forearm and into the client.

Figure 4. The sequence of steps for contract relax (CR) stretching protocol for the right lateral flexor functional group of the neck. A, The client contracts the target musculature against resistance by the therapist. B, The client then relaxes and the therapist stretches the client into left lateral flexion. Further repetitions are usually initiated from the position of stretch attained at the end of the previous repetition.

Figure 5. The sequence of steps for agonist contract (AC) stretching protocol for the right lateral flexor functional group of the neck. A, The client actively moves into left lateral flexion. B, The client relaxes and the therapist stretches the client farther into left lateral flexion. C, The therapist brings the client back to the starting position. Further repetitions begin from the same starting position.

Figure 6. Joint mobilisation of the neck. One vertebra is pinned and the superior vertebra is moved relative to it. No thrust is ever applied with joint mobilisation!

Figure credits

Figures 1, 3, and 6 are reprinted with permission from Muscolino, J. Advanced Treatment Techniques for the Manual Therapist: Neck. Baltimore, MD: Lippincott Williams & Wilkins.


Figure 1


Figure 2


Figure 3

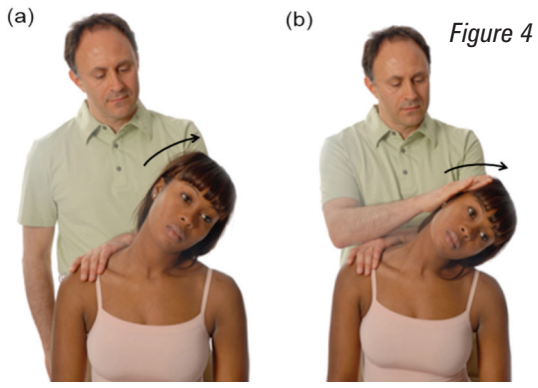

Figure 4

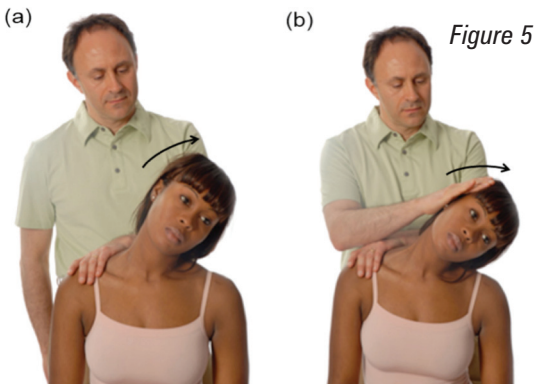

Figure 5


Figure 6

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About the author

Dr. Joe Muscolino has been a massage therapy educator for 25 years. He is the author of eight publications with Mosby of Elsevier, including The Muscle and Bone Palpation Manual: With Trigger Points, Referral Patterns, and Stretching (translated into six foreign languages). He is also the author of an upcoming book entitled Advanced Treatment Techniques for the Manual Therapist: Neck, with Lippincott Williams & Wilkins, publication date 2/15/12; as well as two instructional DVDs on motion palpation assessment and joint mobilisation of the spine. Dr. Joe also writes a column entitled body mechanics in the massage therapy journal (mtj). He runs numerous continuing professional education classes and will be back in Australia, in Sydney and Melbourne, in March of 2012. He has a private chiropractic practice in Fairfield, CT, USA. For more information, or to contact Dr. Muscolino, visit his website: www.learnmuscles.com.

DEFINITIONS

LECTURE
The art of transmitting Information from the notes of the lecturer to the notes of students without passing through the minds of either

CONFERENCE
The confusion of one man multiplied by the number present

COMPROMISE
The art of dividing a cake in such a way that everybody believes he got the biggest piece

SMILE
A curve that can set a lot of things straight!

DIPLOMAT
A person who tells you to go to hell in such a way that you actually look forward to the trip

OPTIMIST
A person who while falling from EIFFEL TOWER says in midway "SEE I AM NOT INJURED YET!"