Dr. Joe Muscolino will be teaching a workshop on clinical orthopedic massage therapy (COMT) techniques in Auckland, NZ on April 4th and 5th, 2012. To register for this workshop or for more information, please visit Dr. Joe's website: www.learnmuscles.com or contact him directly as joe@learnmuscles.com. Visit also his facebook page: The Art and Science of Kinesiology.

Clients come for massage therapy for many reasons. Some come for human touch, others for relaxation. Increasingly, clients are also coming for massage to help remedy their musculoskeletal conditions. In fact, for many clients, massage therapy has become their primary treatment choice when first confronted with joint, muscle, and other soft tissue problems. With the understanding and recognition that massage therapy can be a powerful treatment option for musculoskeletal conditions, the massage profession is taking its rightful place in the world of complementary medicine.

Clinical Orthopedic Massage Therapy (COMT)

Working on clients with the intent to remedy musculoskeletal conditions can be termed clinical orthopedic massage therapy (COMT). Although there are many treatment techniques in the world of massage therapy, one technique approach that is extremely valuable when doing COMT is stretching. In essence, stretching is the elongation of muscles and other soft tissues for the purpose of increasing flexibility and range of motion (ROM).

Stretching

Stretching is essentially a mechanical process. This is true whether classic static stretching is performed, with the position of stretch held for a prolonged period of time, usually between 10 and 60 seconds; or dynamic stretching is performed, with the position of stretch held for a shorter period of time, usually between 1 and 5 seconds. Stretching is a mechanical process because the muscles and other soft tissues are physically elongated. This physical elongation helps to break up patterns of adhesions that can decrease flexibility and motion.

Neural Inhibition Stretching

In addition to adhesions, musculature can also be tight because it is being ordered to contract by the nervous system. In other words, its baseline tone is too high, so even when it is supposed to be relaxed, it is contracting excessively. This is where advanced stretching that utilizes neural inhibition can be used effectively. Advanced neural inhibition stretching utilizes proprioceptive reflexes to inhibit, in other words relax, the tone of the musculature. This neural inhibition increases the effectiveness of the mechanical stretch.

There are two nervous system proprioceptive reflexes that can be utilized: the Golgi tendon organ (GTO) reflex and reciprocal inhibition (RI) reflex. Stretching that triggers the GTO reflex is usually called contract relax (CR) stretching. It is also called proprioceptive neuromuscular facilitation (PNF) or post-isometric relaxation (PIR) stretching. Stretching that utilizes the RI reflex is called agonist contract (AC) stretching.

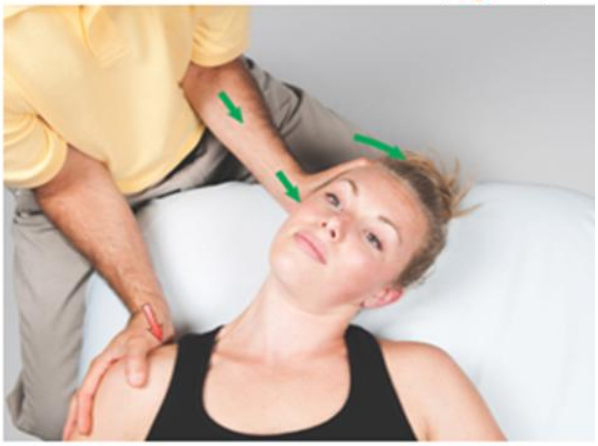
CR Stretching Technique

Following is how CR stretching is performed. For this example, the neck/head right lateral flexor (RLF) functional group of muscles is our target muscle group to be stretched.

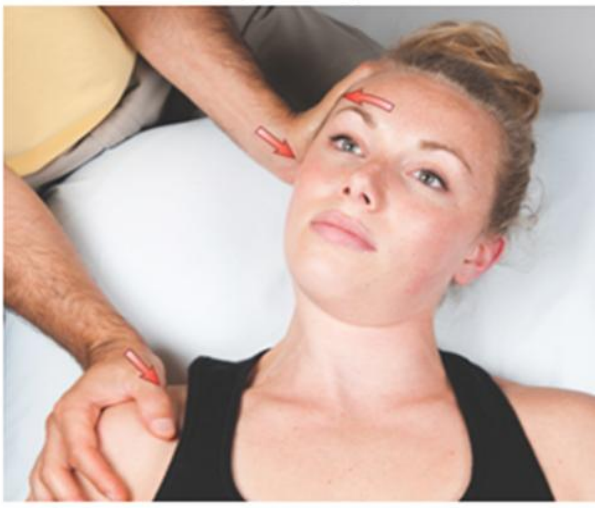
Client starting position: Supine.

Therapist starting position: Seated at head of table toward the right corner; the left (treatment stretching) hand is placed on the right side of the client's head, and the right (stabilization) hand placed on the superior surface of the client's right shoulder girdle. (Note: Alternative hand positioning is possible.)

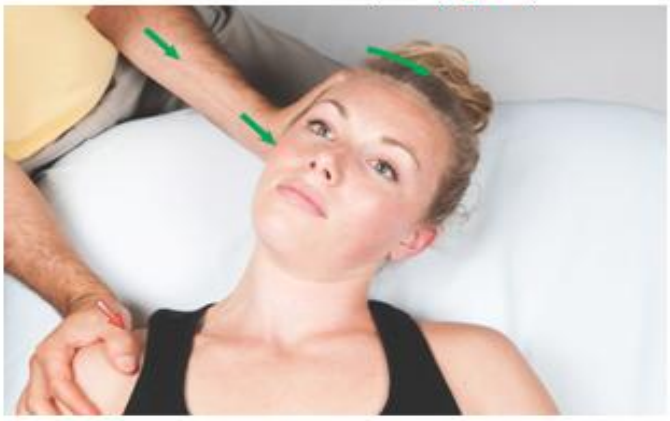
Step 1: Passively stretch the client's neck/head into left lateral flexion until tension is reached (Figure 1).



Step 2: Ask the client to take in a breath and then breathe out as she presses against the resistance of your left hand, trying to right laterally flex the neck/head, for a count of approximately 8-10 seconds (Figure 2). This causes the RLF target musculature to isometrically contract, triggering the GTO reflex, inhibiting/relaxing it.



Step 3: Ask the client to relax and then further stretch her into left lateral flexion until tension is reached, as she finishes breathing out (Figure 3).



From the position reached in the previous repetition, repeat Steps 2 and 3 for a total of three or four repetitions.

AC Stretching Technique

Following is how AC stretching is performed. For consistency and ease of comparison, we will again use the neck/head right lateral flexor (RLF) functional group of muscles as our target muscle group to be stretched.

Client starting position: Supine. Just before beginning, ask the client to take in a breath.

Therapist starting position: Seated at head of table toward the right corner; the left (treatment stretching) hand is placed on/near the right side of the client's head, and the right (stabilization) hand is placed on the superior surface of the client's right shoulder girdle. (Note: Alternative hand positioning is possible.)

Step 1: Ask the client to breath out as he actively moves his neck/head into left lateral flexion (Figure 4). This both begins the mechanical stretch of the target (RLF) musculature and it triggers the RI reflex to inhibit the target musculature.

Step 2: Ask the client to relax and then you further stretch him into left lateral flexion until tension is reached, as he finishes breathing out (Figure 5)

Step 3: Passively bring the client's head and neck back the starting position, as he breathes in (Figure 6).

From the starting position, repeat Steps 1 through 3 for a total of eight or ten repetitions.

Application

Advanced neural inhibition stretching such as CR and AC stretching techniques might take a little time to master and become proficient performing, but are well worth the time and effort. As with all stretching techniques, they are most effective when performed after the client's tissues are first warmed up, so they are usually performed toward the end of the treatment session. You will find that adding these stretches to your COMT practice will yield excellent benefits, both for your clients as well as your business.

Figure Credits:
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Dr. Joe Muscolino has been a massage therapy educator for 25 years. He is the author of the upcoming *Advanced Treatment Techniques for the Manual Therapist: Neck*: LWW, 2012; *The Muscle and Bone Palpation Manual: With Trigger Points, Referral Zones, and Stretching*: Elsevier, 2009; *The Muscular System Manual: The Skeletal Muscles of the Human Body, 3ed*: Elsevier, 2010; and *Kinesiology: The Skeletal System and Muscle Function, 2ed*: Elsevier, 2011.