Fundamentals of Clinical Orthopedic Massage

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Fundamentals

It might seem that the world of continuing professional education (CPE) for clinical orthopedic massage 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 most every treatment technique in the world of CPE are hydrotherapy, soft tissue manipulation strokes, stretching, and joint mobilization. Following is a brief overview of these fundamental components of clinical orthopedic massage.

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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.

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

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 mobilization 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

Orthopedic massage

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

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

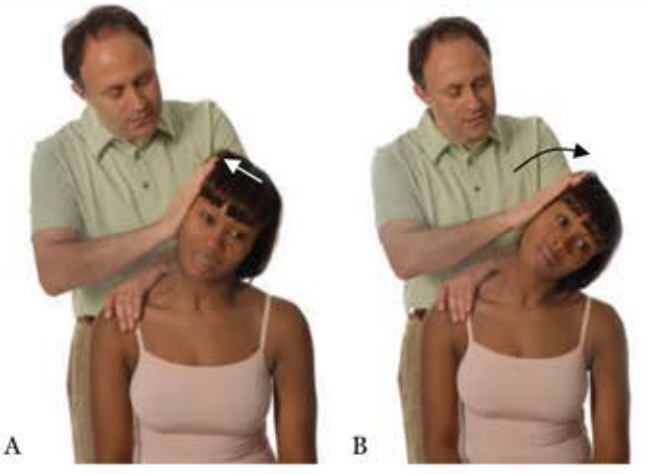

Figure 4. The sequence of steps for contract relax (CR) stretching protocol for the right lateral flexor functional group of the neck. A, The client contracts the target musculature against resistance by the therapist. B, The client then relaxes and the therapist stretches the client into left lateral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

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