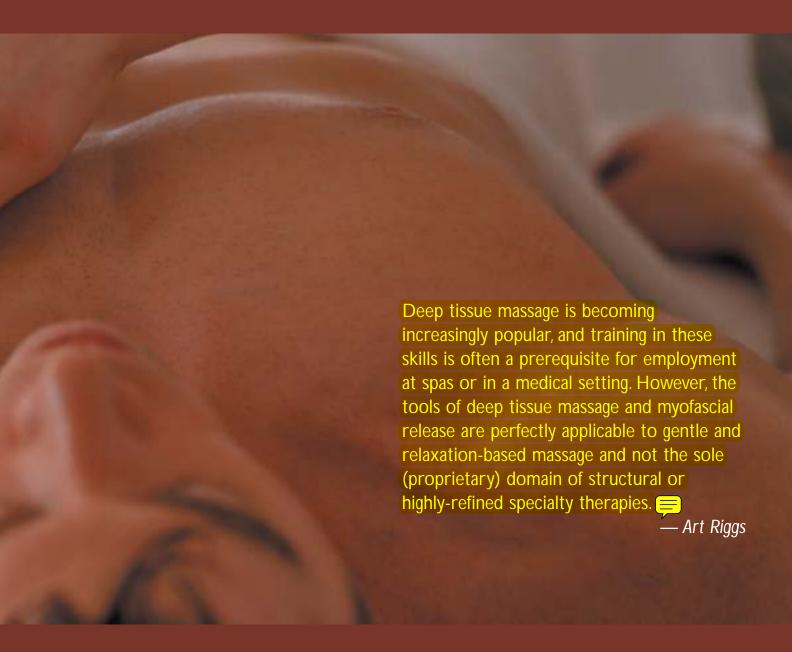


am often surprised by the perceptions and occasional trepidation of students beginning a series of deep tissue massage or myofascial release classes. They are hungry for new skills and theories to increase their effectiveness and to prevent overuse injuries. Yet, they often express reservations about their fears of redefining their practice to only perform "therapeutic" deep work, or exhausting hemselves by working "hard," or of causing their clients pain as they visualize getting a running start from across the room to land with their elbows.

Even experienced therapists may have had little or no training in the basic use of the tools of deep myofascial work. Although a necessity for deep tissue work, these tools are equally effective for more superficial, relaxation-based massage. In fact, I purposely refrain from defining

"deep tissue" work because of the either/or mentality of categorizing work as one or the other. In reality, a therapist should be able to slow down and work deeply any time localized tension is encountered — even in a nurturing, relaxation-based massage.

Knuckles, fists, forearms, and elbows need not be associated with deep, painful, or intense work. In fact, painful work is usually ineffective because the muscles contract against the pain, instead of lengthening and relaxing. The tools of deep tissue massage can be compared to the gears of a car, offering more efficient and versatile options to accommodate for speed, terrain, and whatever purpose you have. The intensity and depth of your massage work are dictated by how much you press the accelerator, rather than your choice of tools.



Beginning students are most comfortable in learning the complex concepts of touch with their hands, and of course it would be foolish and dangerous to prematurely teach the use of powerful alternatives until basic massage concepts are practiced and refined enough for students to translate and expand their newfound manual skills to such versatile tools as elbows/forearms, fists, and knuckles. Some entry-level teachers even withhold these vital skills that would enable new therapists to work more effectively and with less risk of overuse injuries, as well as teaching them how to provide a more pleasing, pain-free massage. New students can levelop a fear or hesitancy as teachers imply that elbows or knuckles are "forbidden fruit," similar to the parent saying, "Not now, dear, wait until you are older."

The problem with this approach is new therapists attempt to work more deeply by straining and using limited options. They are thrown into their practices with a sink-or-swim approach and are intimidated by the prospect of using deep tissue skills that would save their energy, prevent overuse injuries, and significantly improve the quality of their touch and the effectiveness of their work. Therapists may define and limit their practice by restrictions imposed in their early training and are, therefore, uncomfortable dealing with structural and therapeutic issues. Often they begin work in a spa, a chiropractor's office, or athletic setting that requires deeper work. They are presented with an unremitting queue of clients and become injured and burned out when they haven't been sufficiently

instructed in the biomechanical benefits of using more efficient techniques.

Of course these techniques *do* enable deeper, more intense work within the framework of a proper structural or therapeutic philosophy learned in a continuing education format. But, without the tools to work deeply, therapists are often hesitant to explore and expand their work in the blossoming and more financially rewarding fields of structural integration (Rolfing, The Guild for Structural Integration, Hellerwork, and the work of Tom Myers, and other excellent teachers) or more clinical/therapeutic philosophies (Erik Dalton, Paul St. Johns, Ben Benjamin, Whitney Lowe, orthopedic massage, and many others). It's a bit of a "Catch 22": Therapists are hesitant to aspire to the advanced training by excellent teachers because they lack the specific tools and confidence required to learn the work; but, because they don't do the work, they don't feel the need to learn these manual skills.

Once therapists become more proficient at using elbows, knuckles, fists — even in a primarily relaxation-based practice — they often become intrigued by the possibilities of expanding their focus to work more deeply in a structural setting or solve the everyday problems their regular clients present. Proper training in safety is essential, and more therapeutic and structural goals are best taught in a continuing education program with supervision.

The purpose of this article is not necessarily to transform your practice into performing exclusively deep work, but to simplify and enrich whatever work you do by expanding your options. Even advanced practitioners and physical therapists often don't utilize to their full advantage the options that knuckles, fists, elbows, and forearms afford, or they may not use these tools with efficiency. This article will emphasize the mechanics of these tools, while two subsequent articles will focus on utilizing these skills in the context of specific strategies and problem-solving.

Proper Use of the Knuckles

veruse injuries to the thumbs can end your career as a massage therapist. For some strokes, the thumbs are indispensable, but for the majority of massage, knuckles are equally effective and often a preferable alternative. Let's examine the mechanics of proper knuckle use on the back and then demonstrate some examples of their use in other areas that can dramatically reduce your reliance on thumbs. A note of caution: Students are often so excited with the effectiveness that they transition from thumbs to knuckles too quickly and experience soreness. If you have not been using knuckles, begin slowly until your joints can adapt to the pressure.

Proper Use of the Knuckles



Technique photos by David Booth.

The Back

Proper mechanics are crucial. It is imperative the fingers be extended in a straight line at the joint between the metacarpals and phalanges. Notice that the wrist is always used in a neutral position, and the elbow is relaxed, but extended, so force is supplied by gravity rather than muscular effort. The different lengths of the fingers necessitate the use of only one or two knuckles, and your height and distance from the client can control the angle for equal distribution of pressure between the knuckles. The key is to internally rotate your arm so that, for most strokes, your thumb will be down; this allows the wrist to be fixed in a neutral position. Strokes can be applied in a straight line, or rotation of the wrist, arm, and your entire body can approximate the kneading of thumbs.



The Ankle and Lower Leg

If you begin to use your knuckles on the hands and feet, you can cut your thumb use by 50 percent. In the supine position, utilize the soft, f leshy aspects of the knuckles when working over bony aspects such as the ankle retinaculum or the tender aspects of the tibialis anterior. Notice the straight line of force through the wrist and the fact that the opposing hand is used to plantarflex the ankle to provide stretch to the tissue. \rightarrow

Defining Touch

ow long does it take a client to determine the quality of work when she receives a massage from a therapist she's never visited before? Most people say that within the first minute or two they can predict how the whole massage will feel. No matter what particular area of expertise or how many sophisticated workshops we have taken, probably no other aspect of our work defines us as therapists and communicates to our clients who we are as the subjective feel of our touch.

The more deeply we work and the more sophisticated our therapeutic goals, the more important a refined touch pecomes. Most of us have experienced work from therapists well-schooled in advanced therapies who are not proficient at transmitting that knowledge through their hands to accomplish their goals.

Cultivating a sensitive and powerful touch generated by soft hands is a life-long process, but virtually impossible to explain. One essential quality that comes to mind is the concept of "intention." Without a clear intention of the depth at which you focus your energy and a specific goal of what you want to happen, your strokes are simply empty gestures. We all have had massages where beautiful, flowing strokes were emphasized, but we really felt nothing happen in our bodies. This is a sult of placing more importance on "form" than "function."

Some people complain they leave a gentle massage without feeling any change in their bodies. Conversely, the most frequently mentioned complaint about deep work is that it is painful. Rarely is there a need for pain in massage. In fact, pain is actually one of the major obstacles to our goal of relaxing and lengthening muscles and releasing tension. I wish I could offer recall notices to my early Rolfing clients for the unnecessary discomfort I imposed on them — and the wasted energy that exhausted me.

The biggest cause of pain — or a harsh touch — is tempting to *make* things happen, rather than *letting* things happen. Do not try to force tissue into releasing. Rarely is pain a result of working too deeply; often it is simply a product of working too fast. The deeper you work, the more you must slow down. If tissue does not respond, applying more force is rarely the solution. If you find yourself shaking, your joints hyper-extending, or pain in any part of your body, then you are working too hard.

Proper biomechanics are imperative to prevent strain and enable a soft touch. Force should be generated by either gravity or powerful "core" energy provided by your legs, rather than muscular effort from your arms. Many therapists work too close to their clients so their elbows are flexed and force is provided by muscular effort rather than by a direct line of relaxed, but extended, joints all the way to your feet. If fingers do not supply the power you desire, cultivate skill with other tools such as knuckles, forearms, or elbows.

One of the major goals of effective touch is to lengthen shortened or fibrosed tissue. To do this, it is necessary to grab and stretch the tissue rather than just sliding over it with compressive strokes. Clients sometimes mention they feel like they are being molded like clay when their muscles are stretched, rather than just squeezed. Slipping across over-lubricated tissue allows for compression, but very little stretching. Over-lubricating is another cause of overworking and a harsh touch — try turning a doorknob when your hands are slathered with oil to see how much effort is needed to accomplish a simple goal.

Massage therapists are netoriously generous and often attempt to accomplish too much in a single session by working too fast or too hard. Even in a full-body massage, pick one or two areas for each session that will leave your client more integrated and whole, and focus patient attention on these areas. Take your time to free these areas rather than playing "Beat the Clock" in an attempt to cover the entire body, giving equal attention to all parts. I think patience is probably the single quality that dictates our touch. Slowing down and gently waiting for the all-important "melt" to happen is what creates lasting and sometimes profound change in our clients. Waiting for tissue to melt makes our work more efficient by letting us know when we have accomplished our goals in an area, as well as

validating our effectiveness, making our work more satisfying.

Anyone who has danced knows the joy of a partner who is present at all times and reacts to the smallest cue (something) that, sad to say, none of my dancing partners has experienced). Massage is a form of dance between you and your clients. Some clients need more direction than others, and one should not try to dance the same dance with every client. Your strategy will be dictated by many factors: the quality of tissue and holding patterns, areas of fear or pain, and countless other subtle factors, but most of all, the bond of communication and trust between the two of you. A nurturing and easy touch is the most powerful tool you can have to establish this bond.



Plantar Surface of the Foot

When working with the plantar surface of the foot, the key is to grab and stretch the tissue rather than just knead or slide over the tissue because of excess lubrication. Where is the foot not moving properly and restricted by the plantar fascia? In this case, the other hand is flexing the toes away from the direction of knuckle force to increase stretch and free the joints of the forefoot and transverse arch. Notice that the elbow is braced against the thorax so that power is generated by simply leaning forward with your body weight, rather than by muscular effort.



The Hands

Knuckles feel wonderful on the hands and can provide more power than thumbs to release tension. Use your opposite hand to support the client's hand and stretch the palmar surface. Feel how the bones move in the hand and direct your attention to free that layer, as well as superficial tissue.



Knuckles vs. Thumbs

Most of us begin our careers by working on the trapezius and neck with the thumbs — a fine tool when working on a few clients a week. But as you expand your client load, the cumulative strain on the thumbs can cause serious problems. Notice the strain at the wrist and the shearing force on the thumb.

I have always highly respected the work of Erik Dalton and asked him to comment on how the issues of "touch" are addressed in his classes (See "Experience Cannot be Taught" on page 46). Dalton feels thumbs are an excellent tool because of their sensitivity in palpation. I certainly agree, but caution that one must be judicious in their use — saving them for times when they are the best tool for your goals rather than your major choice for indiscriminate work.



The Neck and Trapezius

Specific strategies for working on this area will be addressed in following articles, but a demonstration of the basic biomechanics will enable you to rest your thumbs now. Rest your hand comfortably on the table and keep your wrist and knuckles extended in a neutral position, working just as you would with your thumbs. Working unilaterally offers many more options for stretching muscles and mobilizing the joints than bilateral work on the shoulders. Your left hand is free to side-bend, rotate, and mobilize the neck while working. Clients love the precision in this work.

deep tissue massage

Proper Use of the Fist

The fist is very useful as a relatively broad surface for work on virtually any fleshy area of the body. For the work to feel good, the hand must be relaxed and not clenched with tension. For more specific force, you may focus force directly at the four joints at the junction of the metacarpals and the fingers. For a broader and more forgiving surface, the force can be distributed with the flatter surface provided by the first four bones of the fingers. As with the knuckles, the most important consideration for the fist is to be sure the wrist is in a neutral position and not in a position of flexion/extension or inversion/eversion. Any time your force is compromised through a joint that is not in neutral position, power is lost and risk of overuse injuries increases. Let's take a look at the most common errors when using the fist.





Improper Use of the Fist

The most common error is to have the palm down, which places the wrist in excessive extension. This is actually just utilizing the palm of the hand rather than the fist — a fine stroke by itself, but would be better accomplished by extending the fingers so the hand is flat and the wrist is less extended. In the second example, the wrist is flexed and all the advantages of gravity and efficient use of power are lost. Rotating the arm so the palm is up, as demonstrated in the next examples, will enable significantly more power.



Proper Use of the Fist

When using the fist for long body strokes, it is important to be far enough away from your client so your arm is relatively straight. Force should come from your own body weight or horizontal power provided by the legs, rather than the shoulder girdle muscles. Notice that with the palm facing up with the thumb forward, the wrist is in a neutral position, and the hand and the thumb are relaxed for a softer but powerful touch. Strategies for body placement and release of muscles will be covered later, but notice by dorsiflexing the ankle with the use of his knee, the therapist can place the calf on a stretch to actually lengthen the muscle rather than just compressing it.



The Fist for I.T. Band Work

The fist is an excellent tool to soften and stretch the iliotibial (I.T.) band. Here, the elbow is flexed and braced against the hip so power is provided by the therapist's body weight transferred through the pelvis. Be cautious to not press directly into the femur; as with almost all strokes, sink to the level at which you feel tension and then stretch the tissue with oblique pressure.

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Experience cannot be taught

By Erik Dalton

Palpation is the art of gathering information while simultaneously developing one's concentration, intent, and touch. Considerable time and practice is typically needed for most touch therapists to develop high-level palpation skills, yet some appear born with an innate kinesthetic palpatory awareness. Enhanced palpatory abilities are blatantly tied to the therapist's level of personal satisfaction and professional passion for the work. A few of the most useful palpation lessons to learn include: how to slow down, when to move deeper into motion-restricted tissue(s), how to tune in to the ilent's ventilatory processes (breathing), and how far and deep to follow the tissue release. Accomplishing these tasks may sound simple but it often requires years to master this force called the "Law of Inertial Mass."

In our profession, the following metaphor best describes the idea of inertial mass: Develop a mental picture of how one would push a boat away from shore — shall we run at its hull and give a big shove? No, slow sustained pressure is applied until a resistance barrier is met. As the boat begins to move, more force is gradually applied until the mass of momentum delivers the boat away from shore.

Engaging the body's tissue with too much pressure or too fast, desensitizes hand, fist, and elbow mechanore-ceptors, causing a loss of listening power. Ida Rolf objected to the use of one's thumbs for deep tissue work due to possible damage from strains and sprains. However, in my practice, I find the human thumb to be an exceptionally effective tool if correctly applied. Thumbs are great information gatherers. Unbeknownst to most bodyworkers, the thumb and index finger contain more proprioceptors (sensory receptors) per square inch than the other digits combined.

The more motion exerted by the therapist's hands, the more afferent stimuli is transmitted to the central nervous system for interpretation and integration. The beginning therapist is often guilty of using too much movement when searching for anatomic landmarks and identifying tissue layers. Speed truly is the enemy of depth when working to restore extensibility to motion-restricted tissues, just as lack of enthusiasm for learning is the enemy of passion.

It appears that today's educators are breeding more enthusiasm into the wonderful field of touch therapy by encouraging students to develop enhanced palpatory and anatomic skills. Some schools teach proper hand, fist, elbow, and knuckle techniques in basic training while others may refer students to the school's video library to explore higher level concepts (i.e., structural integration, muscle and joint biomechanics, and pain management protocols). Personally, I believe entry-level students gain greater personal satisfaction and obviously perform better if exposed to a variety of hands-on maneuvers. However, one must pervasively strive to develop a clear intent when engaging the tissues ...

always working with the Law of Inertial Mass.

Recently, a noticeable upsurge of fine therapists are entering the pain management field and for obvious reasons — people feel personally rewarded when helping others in need. But entering this discipline requires that the transition be accompanied by advanced study in palpation skills, assessment, history-taking, biomechanics, pathology, etc. he greatest challenge

most pain management therapists encounter begins in the historygathering stage. Resist the temptation to mentally "box" the client's complaint into a "fix-it" formula that excludes the body as the primary healer. Always keep an open mind and trust that the body's innate intelligence will guide the healing process ... with a little help from friendly hands.

Erik Dalton, Ph.D., brings a broad background in massage, Rolfing, and manipulative osteopathy to his pain-management workshops. Dalton is director of the Freedom From Pain Institute and developer of the Myoskeletal Alignment Techniques. Visit www.ErikDalton.com for additional information.

The "Naughty Nine" most common palpation errors

- 1. Unsatisfactory therapist concentration/intent
- (2. Pressure too intense ...)
 (too fast (blasting the barrier)
- 3. Too much movement (jiggling-hands syndrome)
- (4. Limited ability to distinguish) soft tissues (i.e., muscles, ligaments, tendons, joint capsules, visceral structures, etc.)
- 5. Inability to identify and treat spasmodic muscles, fascial contractures, fibrotic tendons/ligaments, and boggy, edemic tissues.
- 6. Failing to tune in to client's ventilatory processes (i.e., meeting the restrictive barrier, resisting on inhalation ... taking up the slack on exhalation).
- 7. "Un-grounding" the client
 faulty body mechanics
 blocking energy flow
 (through the legs.)
- 8. Improper application of extended finger and fist techniques ... therapist must engage the tissue, "hook" the fascia, and drop the wrists.
- 9. Choosing the wrong tool for the job (i.e., use of fingers) when a larger tool, such as the elbow, fist, or knuckle, may produce less strain on the therapist).

— Erik Dalton