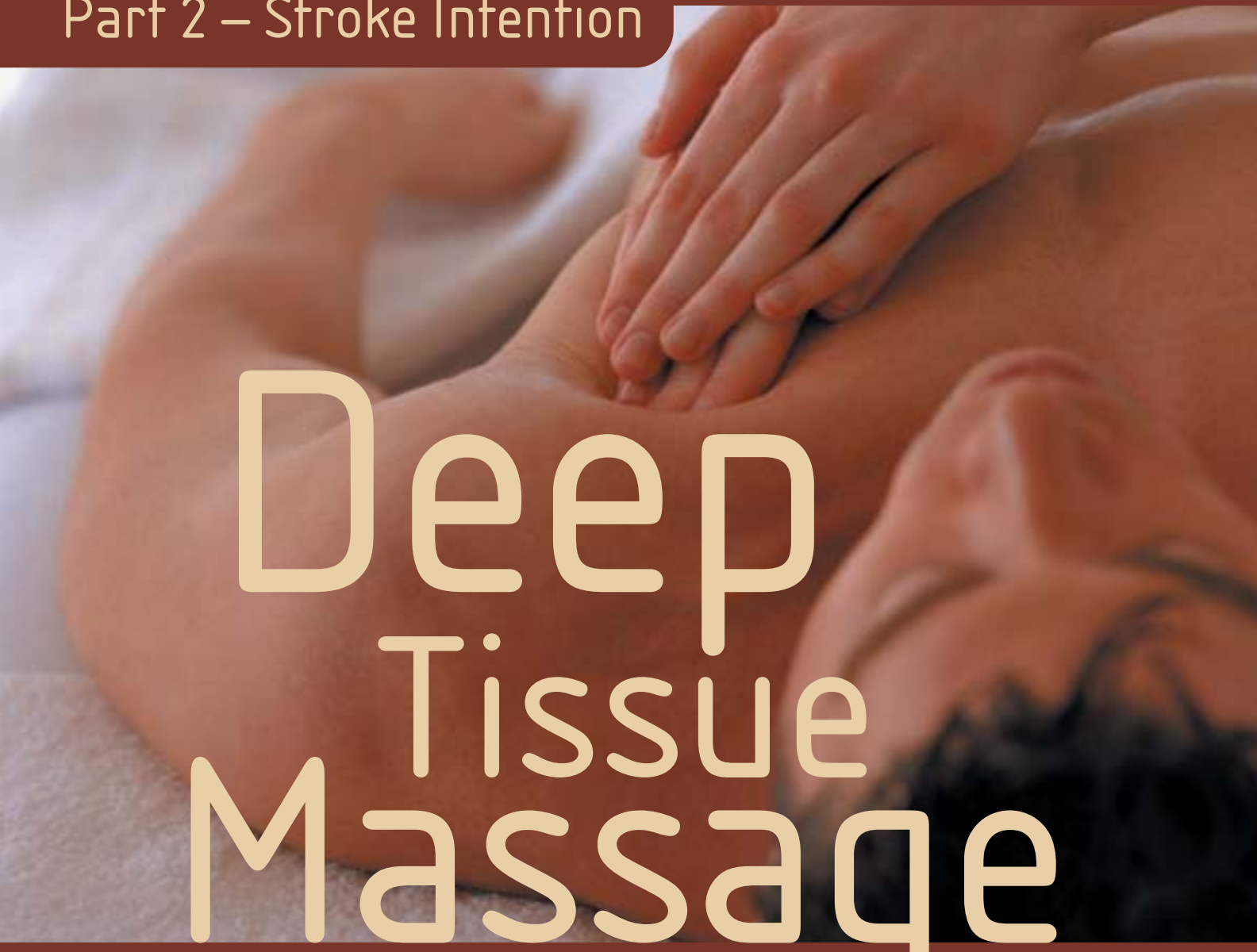
Part 2 – Stroke Intention



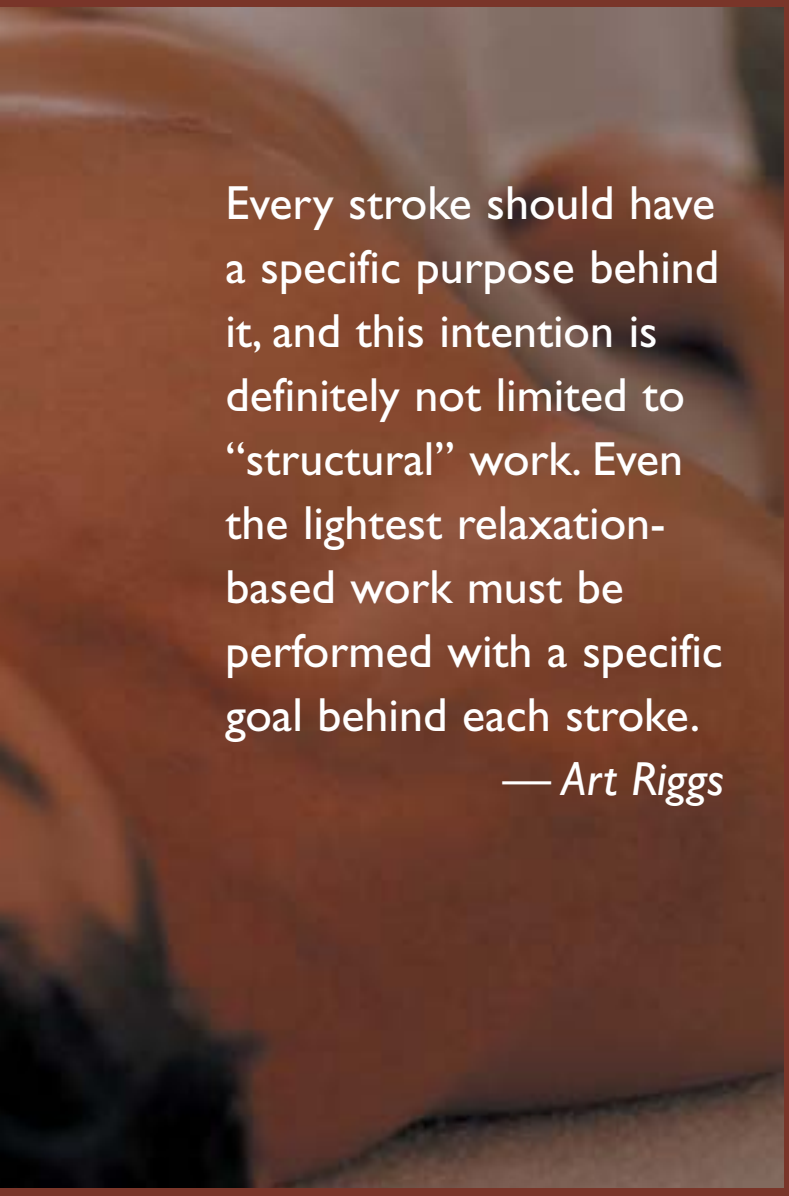
Deep Tissue Massage

By Art Riggs

In the first part of this trilogy, we explored the proper use of knuckles, fists, forearms, and elbows to enable you to work at greater depth, with more ease and effectiveness, and with less risk of overuse injuries to yourself ("Deep Tissue Massage, Part 1 — The Tools, April/May 2005, page 38). Now, we turn our attention to the application of these biomechanical principles to accomplish precise goals rather than simply performing strokes.

We have all experienced a massage where the therapist performs strokes with great flourish and grace, but nothing happens. Clients often disappointedly describe such a massage as one in which the therapist didn't work deep enough. Although this may occasionally be true, more often it is a result of emphasis of form over function and a lack of intention behind the strokes. Every stroke should have a specific purpose behind it, and this intention is definitely not limited to "structural" work. Even the lightest relaxation-based work must be performed with a specific goal behind each stroke.

Closely linked to intention is the concept of "being present." Everyone has experienced bodywork where the therapist just "isn't there"; conversely, we've all, in different degrees, felt that absence of focus in our own work. I have found that whenever I find my concentration wandering to such important subjects as what I'm having for dinner or last night's movie, there is an absence of purpose and intention to my strokes, and the quality of my work deteriorates significantly. This happens most often with clients who primarily are interested in "zoning out" and present few if any requests or complaints that stimulate



problem-solving focus. If this is the case, then you must find this focus by your own evaluative skills.

Some therapists berate themselves for lapses in concentration and feel the solution of achieving a focused presence in their bodywork lies in achieving some special Zen focus that few of us are able to achieve. Meditation, coffee, or chocolate are also not the solution. From years of teaching even experienced therapists, I've grown to believe the large majority of ineffective and unfocused work is a result, not of some attention deficit, but from the performance of perfunctory and rote strokes — of a lack of purpose and goals that need to be accomplished. Expecting purposeful and effective strokes to come just from your inner state of concentration is unrealistic — focus comes from intention to accomplish specific goals, not visa-versa.

Let's examine a few of the major goals that should dictate your choice of strategies and strokes that are driven with intention and function, even if your client does not have specific complaints.

As soon as a client walks through the door, I begin to plan my session. Watching her move, I look for transmission of movement through joints and for areas where muscles appear short and inflexible. Since my tactile skills are more refined than my visual skills, I begin each session with a few minutes of broad and holistic strokes, attempting to determine if tension is held in the upper or lower body, on one side more than another, or on the anterior or posterior body surface. Although your goals may change as you progress through the massage, it is a good idea to choose two or three crucial areas you feel would enable your client to leave the session with a better sense of freedom and release of tension. Be specific. Where are restrictions? How deep? Are they in the muscle belly or tendon? Or are they in protective holding patterns, either structural or emotional? Or perhaps in the ligaments and articulation of the joint itself? How can you provide better transmission across joints, work with rotational abnormalities, and create better balance in the body?

Body reading exercises often focus on questions of whether one shoulder or hip is higher than another, or other such quantifiable issues. Remember the body is not symmetrical, and that symmetry is not the same thing as integration and balance. Many of the structural integration schools offer training in recognizing these patterns and strategies to bring balance to a client's structure.

When you have a few goals for your massage, it is then time to utilize the panoply of tools at your disposal. In addition to the specific tools such as fingers, knuckles, fists, or elbows, clarity in the purpose of those strokes should be the next consideration.

Longitudinal Lengthening Strokes

Lengthening strokes (working in the same direction of the muscle fibers) are among the first taught and are a central basis of most massage theories. Remember for deep tissue massage and structural work, the emphasis should be on lengthening (stretching) and mobilizing tissue and improving joint function, not just squeezing or sliding over tight areas. The emphasis should be on the "release," as in the term "myofascial release." Imagine pulling taffy rather than just compressing tissue as you slide over it. The great majority of dysfunction and pain in the body comes from short muscles, and the purpose of longitudinal strokes is to lengthen these habitually shortened muscles. This will be very difficult to achieve if you use so much lubrication it is impossible to grab and stretch tissue. Actually, the basic lengthening strokes need to be clarified with some distinctions of your intention.

Figure 1

Decompressing the Hip While Working the Quadriceps

The forearm is a useful tool for the long strokes needed to release the quadriceps muscles (see Figure 1). Tension and shortness in these muscles can cause problems with joint compression at the acetabulum, restrict hip extension or knee flexion, or cause knee compression and torsion distally. Repeating long flowing strokes without clarity simply is not enough. Much is made in early massage trainings of always working in the direction of blood flow returning toward the heart, but notice in this example that the stroke is moving away from the hip in an effort to decompress the hip joint, and the opposite hand is tractioning the femur from the hip. You may also rotate the leg to improve internal or external mobility. In this case, the benefits of freeing the acetabulum and mobilizing the hip joint by stretching the muscles and femur away from the joint override an inflexible rule of always working in the direction of venous return. Also, don't get hooked into always performing long flowing strokes. Muscle tightness is rarely distributed evenly throughout the muscle belly. It often is preferable to not continue a lengthening stroke for the entire length of the muscle and, instead, concentrate on isolated fibrosed or short areas with short repeat strokes, rather than performing superfluous long strokes in unneeded areas.

Figure 2

Freeing the Knee Joint While Working the Quadriceps

In Figure 2, the purpose of the stroke is to decompress the knee. Here, the opposite hand is tractioning the lower leg to decompress and release the knee joint and can even rotate the lower leg to counter rotational restrictions at the knee. Whichever direction you are working, focus not only on lengthening tissue but improving function by removing torsional strain. Is the tibia rotated internally or externally relative to the femur? Is the femur externally or internally rotated at the hip? Is the iliotibial band pulling the quadriceps muscles laterally? If so, apply force at an angle to increase rotation where it is restricted.

No matter what your goals, always consider the depth at which you feel tension. Is it superficial or deep? Is the restriction in the superficial fascia, muscular, ligamentous, or osseous component? To determine this, it is necessary to move to the end range of motion. If motion stops abruptly, restrictions may be the osseous component of the joint. If slightly more "play" is felt, it may be primarily ligamentous. If the restriction is primarily muscular, you will feel a steadily increasing resistance as you reach the end range of motion and the muscle stretches. Sink to the level of tension. Then, apply longitudinal lengthening pressure while, at the same time, dissipating rotational dysfunction by rotating the leg to the end range of easy motion and directing your stroke to counter torsional strain. Remember, you are grabbing tissue, not just sliding over it.

Anchor and Stretch Strokes

Figures 3 and 4 demonstrate a useful corollary to longitudinal lengthening strokes — and another way to add precision and clarity to your purpose. Image a rubber band with a knot tied in it. If you stretch the rubber band, the flexible areas will stretch, while the knot will remain unchanged. In the same way, muscles become short and fibrous in isolated segments rather than uniformly throughout the length of the muscle. Specific lengthening techniques must be applied differently to these areas to affect release at a very precise area.

Figures 3 and 4

Prone Hamstring Work

As shown in Figures 3 and 4, flexing the knee shortens and softens the muscle, allowing for easy and pain-free access to deep, fibrosed, and specific areas of the hamstring. It is crucial to realize you are not sliding over the area with repeat strokes. Your intention will be similar in some ways to trigger point work, but will have the added power of stretching the muscle at the specific area of tension as you extend (straighten) the knee, while anchoring at the precise spot of tension. Envision grabbing and anchoring at the specific area of tension and slowly stretch the muscle away from this anchor point by extending the leg to either stretch tight superficial fascia or release deeper muscle adhesions. →

The stretching of the muscle adds an element of neurological release missing in trigger point strokes that simply hold the spot without movement or that work in a neutral position. As the muscle melts and lengthens in the shortened position, you may continue to extend the knee and stretch the muscle, always working within the comfort range of your client. You may exert steady lengthening pressure on the muscle or do very short repeat strokes from slightly different angles or depths. Depending on your finger strength or the amount of precision needed, you may utilize either knuckles or fingers. Strokes described a bit later will demonstrate the importance of separating adjacent muscle compartments; sufficient finger strength will be necessary and useful for their precision in this case.

Figure 5

Supine Trapezius Work

Anchoring and stretching anywhere along the trapezius is extremely effective, either to lengthen the entire muscle or to release trigger points. By gently cradling the neck and supporting the occiput, it is possible to side-bend and rotate the cervicals in many different angles to stretch the trapezius. You may also call for active motion by instructing clients to extend their arm down toward their feet or to rotate or side-bend their head away from the area where you are working. Although it certainly is acceptable, especially in warming up the area, to use more flowing strokes moving in the opposite direction, be sure to anchor on fibrous areas and then very slowly manipulate the head and neck to stretch the muscle at the precise area of restriction until you feel the area soften or melt. Notice how in Figure 5 the left hand is comfortably resting on the table as the right hand can rotate and side-bend the neck to stretch the muscles and mobilize vertebrae. This versatility will not be possible if you always work bilaterally with the head and neck in a neutral position.

Improving Joint Function

Lengthening short muscles and relaxing spasms and adhesions offer great relief for many of the complaints our clients present — especially in the postural muscles of the back, such as the erector spinae and trapezius muscles. However, a great many of the problems we encounter involve pain in joints rather than in the belly of the muscle. The balance of the forces on a joint can be upset by weakness, injury, overuse, or postural patterns. Your role as a therapist will be greatly enhanced if you are able to improve function of the joint by balancing the rotational strain imposed on it by improper alignment of tight muscles.

Separating Muscle Compartments

Figure 6

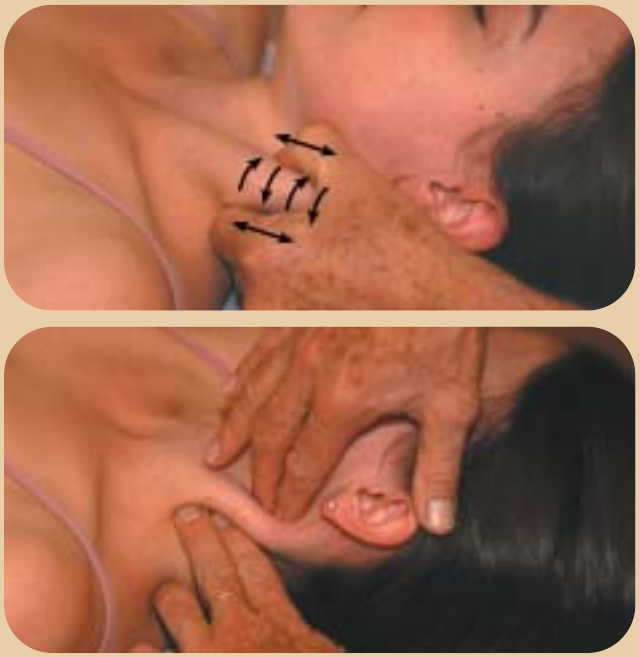
Dysfunction Caused by Muscle Misalignment

Properly functioning muscles should be able to slide freely with differentiation from their adjacent neighbors. However, adhesions can cause parallel muscles to adhere to each other preventing the smooth sliding of adjacent muscles and the differentiation of function necessary for proper joint movement. Figure 6, an X-ray of a client, exquisitely demonstrates the importance of clarifying muscle compartments to relieve torsional stress. Taken from above the patella with the knee bent in weight-bearing, the X-ray demonstrates how lateral stress caused by a tight iliotibial (I.T.) band that is pulling the vastus lateralis laterally interferes with the tracking of the patella. This creates patello/femoral pain due to the bone-on-bone grating of the patella against the left condyle of the femur. Undifferentiated kneading to the knee or quadriceps will prove ineffective in resolving this dysfunction. It is necessary to differentiate the I.T. band from both the vastus lateralis and the lateral hamstring so that it can exert its force in a straight line and free the patella to move more medially. Clarifying the various vectors of strain on the knee can have a profound effect on returning proper motion to the knee and patella.

Figure 7

Clarifying Muscle Compartments

Figure 7 illustrates a strategy to improve knee tracking by clarifying muscle compartments to alleviate the torsion caused by muscles adhering to each other. Force must be applied with precision, so either the knuckles or fingers will be your best tools. This work is intense and must be performed very slowly and meticulously. Find the indentation separating the vastus lateralis and/or the semitendinosis from the I.T. band and slowly work up or down to clarify the separation between the compartments. You can actually feel adhesions between the compartments of these structures as you move; visualize prying the compartments apart rather than just trying to soften or lengthen tissue. With your client in the side-lying position, flexing and extending the knee either passively or by asking for motion from your client will expedite the process. Bicyclists and runners love this work.



Figures 8 and 9

Freeing Muscles from Deep Restrictions

Separating muscle compartments can be of benefit virtually any place where muscles overlap. Sometimes, rather than freeing muscle compartments from parallel neighbors at a superficial level, it is necessary to extricate a muscle from deeper restrictions. Figures 8 and 9 may appear to be rather intense, but clients almost always comment on how good it feels to differentiate the sternocleidomastoid muscle, enabling it to exert its force unimpeded by adhesions to deeper muscles. Rotate the head slightly away from the sternocleidomastoid (S.C.M.) where you are working (this actually shortens and softens the muscle so you can grab it) until you find a length that allows you to gently grab and lift the muscle with soft fingers. Once you have a good grip (use either one hand to grab the muscle, or use both hands to apply specific pressure when it is difficult to grip the S.C.M.), slowly lift the muscle, move it up and down or from side to side until you feel restrictions. Exert a slow steady pressure and visualize "rolling" the muscle away from deeper tissue until you feel it soften and melt.

Figure 10

Clarifying Shoulder Muscles

Proper differentiation of the complex levers that move the shoulder through its range of motion is essential for pain-free function. In this example shown in Figure 10, rather than just kneading the pectoralis major, the arm is abducted to stretch this muscle, but the major emphasis is on freeing it from deep adhesions and delineating it from the anterior deltoid. Place enough stretch on the muscle to allow it to release and lengthen, while at the same time, lifting it and rolling the muscle belly, or performing precise strokes to allow it to slide over the ribs, or to clarify its articulation with the deltoid.

Allowing Muscles to Roll

Muscles should be able not only to lengthen, but also to roll along the long axis of the bones. Although this principle →

Figure 11

could be applied to the quadriceps, biceps, and other muscles, the calf muscles most easily illustrate this principle. If the soleus and gastrocnemius are "stuck" to the posterior tibia or rotated laterally or medially, their contraction may cause torsion on the ankle or strain to the Achilles tendon. As shown in Figure 11, grab the posterior complex and lift the muscle away from the bone. When you reach the end range, it is crucial to be patient and wait for the adhesions to slowly release as you lift the muscles. It is equally important to determine if the muscles are able to roll easily along the long axis of the tibia or if there are lateral or medial restrictions that pull the muscles to one side. Roll the muscle to end range of restriction and wait for it to release so that when it contracts, it exerts its force on the Achilles tendon in a straight line rather than with torsion. Often the forces that disrupt proper functioning of the leg muscles (both above and below the knee) are in the superficial fascia, which thickens as forces of foot impact are transmitted up the lateral or medial aspects of the legs depending upon the mechanics of the feet. Feel the tissue to determine if the medial or lateral aspects of the leg need more focus.

Allowing a Muscle or Joint to Shorten

Most massage and myofascial release is designed to increase mobility of a joint by lengthening short tissue that impedes the action of its antagonist. In some cases, however, tissue has a tendency to "bunch" when asked to shorten, making joint movement difficult. The retinacula that surround the ankle and wrist are a perfect example. If the retinaculum is fibrous and immobile, it prevents the long tendons of the forearm from sliding freely, preventing the joint from flexing and extending with ease. This is particularly important in cases of overuse injuries of the wrist in clients who spend large amounts of time with their wrists flexed at a computer keyboard.

Figure 12

Improving Wrist Extension

In Figure 12, the bunching at the wrist is very obvious, so in addition to lengthening the forearm flexors, which may be inhibiting wrist extension, a worthwhile strategy would be to work on the wrist while increasing the end range of wrist extension. Imagine a tight sleeve that is adhered to the wrist. Grab the bunched and inflexible tissue with soft fingers or knuckles and envision sliding the superficial tissue and retinaculum proximally and in any direction that will smooth the wrinkles — freeing the "sleeve" — while at the same time working to increase extension of the wrist by mobilizing the carpal bones. Try this technique on the ankle also; clients will immediately notice the increased freedom and ease of movement.

Figure 13

A Corollary for Cross Fiber Strokes

Anyone who has taken a sports massage class is familiar with cross fiber strokes. Sliding over either the muscle belly or the tendinous insertion in a perpendicular direction to the fiber direction is a time-proven method effective for breaking up adhesions and treating tendinitis. There are, however, some effective variations to add versatility to your repertoire. In Figure 13, rather than sliding over and back across the surface of the I.T. band, visualize grabbing, rolling, and mobilizing the entire area from both deep restrictions and from adjacent, parallel muscles.

Figure 14

The Erector Spinae Muscles

Figure 14 demonstrates a slightly different intention. We all have experienced erector spinae muscles that refuse to soften or lengthen as they are stuck to the ribs. You may use your fingers, as shown here, or you may use a long and powerful tool such as the ulna of your forearm to save your fingers. Apply perpendicular pressure to either the lateral or medial border of the erectors in order to "snowplow" large sections of the muscle and allow more freedom for lateral/medial movement as you free the erectors from deep restrictions. It is crucial that you visualize sliding the muscle over the ribs rather than just rolling back and forth

over it. This technique requires patience as you wait for the muscle to melt and begin to slide over the ribs.

Planning Your Session

So how do you determine which stroke strategy to use? Although skilled manual techniques certainly are necessary to carry out your goals for each session, unless you are able to determine where to work and how muscles are restricted, it is difficult to plan a strategy. The best bodyworkers seem to have an uncanny knack for evaluating where tension lies in the body. These evaluative skills actually take longer to acquire than specific strategies and certainly are too complex to cover in one short article. That said, let's discuss some of the ways to further cultivate your talent in this area.

Remember, any time spent solely in evaluation is time unavailable for actual treatment. Often, students spend considerable time wearing their "evaluation" hat and then abruptly shift roles to performing strokes or jumping back and forth between these skills. This is disruptive to the continuity of the session because of the different energy and intention needed. Sometimes this is actually necessary, but in most cases, it is advisable to cultivate your palpation and evaluation skills while actually performing strokes. If your client's body position or other factors necessitate testing for restrictions, it is often possible to camouflage your intention by performing strokes while testing. Also, your first perception of where tension lies is almost always the correct one. I often see therapists continuing to probe muscles or tendons or test joint range repeatedly when their first test told them everything they needed to know.

Acute skills of evaluation are, of course, crucial to find tension. Your clients will respect your skill if you automatically slow down and work on areas that need it without their having to point out tension to you. Often, they will be unaware of this tension anyway. If you are able to shift gears and slow down in problem areas, it will demonstrate your realization that they are unique individuals and that you are not performing a paint-by-the-numbers massage.

Aside from finding tension, your evaluation skills are almost as important for the other side of the time management coin — knowing when to stop work on an area and move on. It is frustrating to have a therapist overwork an area that relaxed in the first couple of strokes. Always be reading the tissue you are working with so you can move on to greener pastures when your work is done. Related to this issue is knowing when to let discretion be the better part of valor and realize that no matter how much time you spend on some areas, they are not ready to relax. If an area refuses to relax after one to three minutes of repeated strokes, then it is doubtful that repeating these strokes for any amount of time will prove successful. Either move on and hope you have already given input that may allow the muscle to relax later, or change strategies and work in a different way or on satellite areas that may be associated with the tension. Just as a stroke performed without intention can be an empty gesture, any time spent performing superfluous strokes on an area where you have already accomplished your intention — or are not experiencing success after sufficient time — is a lost opportunity to be working in more productive areas.

Next in the Trilogy

The strategies covered in this article are just a few of the options available to you. The next article will broaden these principles into specific strategies for stretching muscles and improving mobility of the joints. One of the biggest causes of burnout and boredom, especially in spa situations, is the rote application of strokes. Always look at each client as a new problem-solving experiment to express your creativity. The principles of clarity of goals and stroke intention apply to all areas of the body. Practice these strokes, and better yet, invent your own strategies to accomplish your priorities on any area that requires special attention. Combining these theories with the biomechanics and tools of the first article will not only improve your effectiveness, but will make your work more fun and rewarding. M&B

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