Points of Departure

Thomas Myers

Thomas Myers trained directly with Dr. Ida Rolf, Dr. Moshe Feldenkrais, and Buckminster Fuller and has practiced integrative bodywork for over 25 years in a variety of clinical and cultural settings. Former Chair of the Rolf Institute®'s Anatomy Faculty, and founder-member of the National Certification Board for Therapeutic Massage and Bodywork, Tom currently conducts professional seminars internationally through Kinesis, Inc. Tom is the author of 'Anatomy Trains' published in 2001 by Harcourt Brace, as well as numerous articles for trade magazines and journals. As a Touch-in-Parenting instructor, and as founder of the London Children's Structural Clinic, Tom retains a strong interest in perinatal issues, and in early childhood somatic education.

Abstract

Three small but important myofascial structures—the teres minor, tibialis posterior, and psoas minor—are explored for clinical relations and strategies in Structural Integration (SI).

Globalocal

To declare a prejudice from the outset, I am an avid proponent of the holistic and educational aspect of Ida Rolf's work.[1] Structural Integration is, as she herself said, in the line of Asklepios, not in the line of Hippocrates.[2] Structural Integration is one jewel on a long necklace that links our daily work to yoga, osteopathy, the Alexander Technique, coaches, personal trainers, dancers, and many others in this line of inquiry: 'How do we alter intra-somatic spatial relationships and what meaning can such changes bring to our human experience?'[3]

These holistic systems work under the premise: 'Make the whole person function better and symptoms and conditions will clear up of themselves'—an essentially homoeopathic concept.[4] The best intervention does not cure a disease, but rather awakens the person's own inherent healing process that may have become blocked—and they cure their own dis-ease.

Thus, there can be no single 'frozen shoulder' protocol for Structural Integration. The intervention depends on the individual, not the identified condition. Ida said it and we repeat it: do not chase the pain; squeezing the balloon in one place will only make it pop out later in another. Rather, we ask the question: 'Why did this problem not get repaired in the natural course of things? What is keeping this body from making it well on its own?' That line of questioning will lead to varying places for different frozen shoulders, based entirely on individual patterning. In other words, protocols will never replace the need to see.

The more practical and less poetic among us (including my own inner skeptic) say, 'C'mon, there are common patterns, and these patterns lend themselves to protocols, which can be modified for the individual for sure, but can also be time-saving procedures to learn.' True enough—so by no means is this point-of-view intended to denigrate the fine work of Peter Schwind [5], Clay Cox [6], Richard Rossiter [7], Liz Gaggini [8], Erik Dalton [9], and others in our community who have contributed to our clinical understanding of specific problems—God knows we need the information and applications!

But, if Structural Integrators become fixated on solving 'problems' in direct competition with physiotherapists and orthopods, we are likely to lose that contest. Both those groups are far more numerous, qualified to 'diagnose', and better resourced for research and channels for dissemination. As we develop new protocols, they will be absorbed into this larger system, as individual SI techniques and strategic approaches already have been.[10]

If our clinical competence comes at the cost of our integrative paradigm, then it is not worth it, for we lose our ticket to the future. Whatever the outcome of the current (and discouraging as of this writing) health care debate, we can anticipate that within a few decades a more holistic medicine will come to the fore. When that happens, education in self-use (such as SI is, at its foundation) will be seen as a primary preventive method in the troika with good nutrition and effective communication. When that moment

comes, I pray we are ready with a developed holistic approach to human structure that Ida Rolf first sought via the ten series, not a collection of 'fix-it' protocols, however effective.

It is commonly said that we will not solve the problems of the future using the presumptions of the past, and the 'fix-it' mentality, however useful, is decidedly from our reductionist past. Please forgive this preamble that is meant to ensure that the following descent into three particulars that form the rest of this article in no way negates or substitutes for the whole. They are each merely points of departure.

Teres Minor

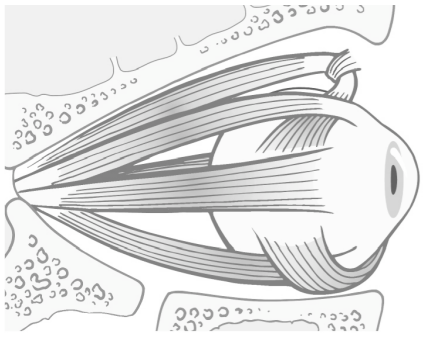
Located firmly within the Deep Back Arm Line[11], the teres minor is one of the few muscles capable of exerting lateral rotation on the humerus. More to the point it is capable of preventing medial rotation. Since we do more of our arm actions with medial rotation than lateral, the teres minor acts as a medial rotation 'brake' far more often than it does as an active lateral rotator (as it would, for instance, in a tennis backhand). We could instructively call the teres minor the 'quadratus femoris of the shoulder'.

To find the teres minor, stand behind your seated client and palpate at the halfway point between the posterolateral edge of the acromion and the top of the skin fold that marks the back of the armpit. Strum up and down at or just above this point and in most people you will find a zinging myofascial band running horizontally across the gap between the lower scapula and the distal part of the greater tubercle of the humerus. It often is about the size of the client's little finger, and can be so taut that it feels as if you are strumming over a short pencil in the flesh. It will be above the teres major / latissimus tendon that together form the posterior edge of the armpit.

This tiny muscle is a frequent repository of active and passive trigger points and excess tension. Simply 'rubbing out' that tension via NeuroMuscular Therapy (NMT) or other manual techniques is only a temporary fix and the tension will return shortly. The only change being that the client feels it more acutely when it returns, their area of sensori-motor amnesia having been awakened.

Why the body requires such tension refers us back up to the preamble and in either direction along the Deep Back Arm Line, but something useful can nevertheless be found here to guide the practitioner's search.

Look to the medial rotators. There are so many medial rotators of the humerus and even the scapula that some or one of these may be overly tight, requiring the eccentric loading of the teres minor. Subscapularis is a frequent culprit here, but excess tension in the larger teres major or latissimus or even a short pectoralis minor can require an answering tension in the teres minor.



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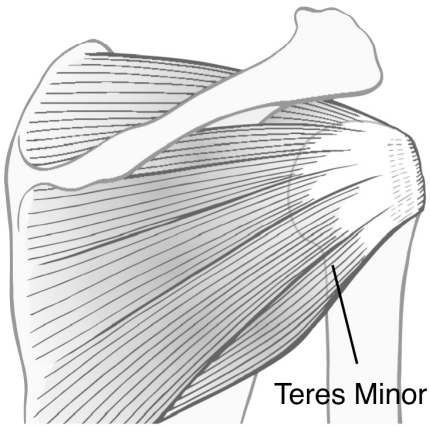

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Figure 1. The teres minor (small round) muscle is but a small part of the rotator cuff, but a large player in shoulder dynamics.

Look to rhomboserratus balance. The scapula is slung between the rhomboids and levator scapulae on the spine side, and the serratus anterior on the lateral ribs, a sling so continuous in both muscle and fascial tissue that it could be seen as a single 'rhombo-serratus' muscle.[12] Insufficient tone in the rhomboids can lead to their being held in eccentric loading, unusually lateral from the spinous processes. This position requires the rotator cuff, frequently in the form of the teres, to contract concentrically to make up the difference. Which of these is the chicken and which

the egg makes little difference to the approach: release the entire serratus anterior (not just the lower part) as well as the teres, and then assign exercises (or refer) to rebuild tone in the rhomboids.

Look to the other fascial 'bridges' between the scapula and humerus. If we look at the relaxed shoulder from the back, we might see the scapula and the humerus as the two legs of the letter 'A', and we could then see the teres minor as the rung that joins the two. Unless the rung is elastic, then the angle between the scapula and humerus cannot change much. If we ask the client to abduct, we will see the scapula upwardly rotate more than 1:3 relative to the humerus, the ratio we would expect in the mature adult. If the scapula is moving with the humerus degree for degree, then we need to open the rung.

But the teres minor is not the only rung; this 'A' has three progressively shorter rungs, of which the teres is the middle one. The outer, more distal rung is the latissimus-teres major complex that forms the back of the armpit. This lower rung is usually opened in the first or more often the third session of the ten-series, whereas the middle rung of the teres minor can be overlooked. The third, inner rung of this letter 'A' is the bottom of the shoulder capsule and associated fasciae, and this rung needs to be opened last, after the other two, with careful work under the ball of the humerus. (Erik Dalton has well-developed technique descriptions for this area.[13])

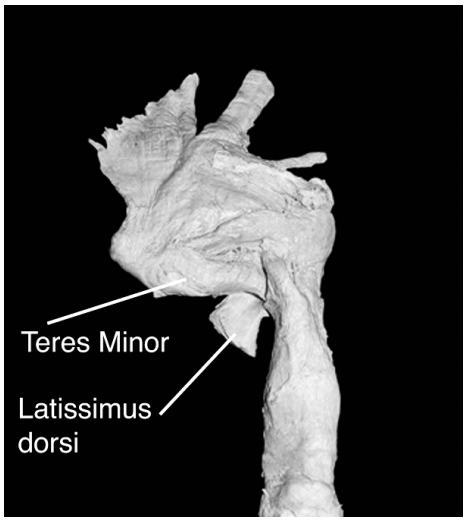

Figure 2. The teres minor is the middle 'rung' of a set of connections between the scapula and the humerus, any one of which can functionally tie the two together.

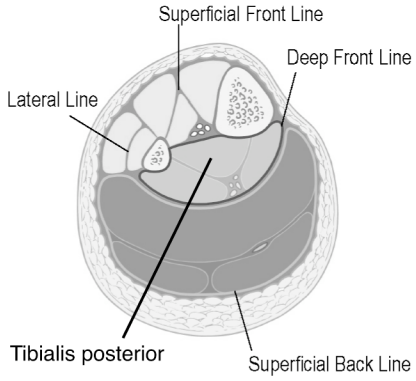

Figure 3. The fascial compartments of the lower leg in cross section (after Netter) shows both the importance of the tibialis posterior and the difficulty of reaching it directly via manual therapy.

Tibialis Posterior

The most inferior major muscle of the Deep Front Line[14], tibialis posterior is a conundrum for manual therapists. The importance of this myofascial unit is clear as a major inverter of the foot, and thus as an important stabilizer of the medial longitudinal arch and the proximal transverse arch. Antagonist to both the fibularii muscles (for inversion) and the tibialis anterior (for plantarflexion), the complex balance of muscles necessary for good arch support while retaining foot resilience makes access to this muscle tremendously important.

Additional import comes from its longitudinal fascial connections across the back of the knee to the adductors and thence to the pelvic floor via the adductor magnus.[15] Release of the tibialis posterior and the associated transverse posterior septum is often necessary for full core development (using 'core' in this case as Pilates does—the abdominal balloon[16]) and absolutely necessary for full core awakening (using 'core' as Ida Rolf does—the inner line of the leg and the structures running in front of the spine).

The conundrum comes in that this structure is hard to reach and effect, lying as it does on the profound side of the soleus, even below the long toe flexors up against the posterior surface of the interosseous membrane (another measure of its importance as a tensor of the 'inner bag').

The traditional fourth hour recipe skates over this area (in my experience of being trained and watching trainings, including ones I had

with Ida Rolf—no disrespect for any particular training intended.. The recipe calls for spreading along the inner line of the lower leg from ankle to knee before freeing the pes anserinus and the adductor group fasciae. More specific work, however, is required to make significant changes in this arena.

Sit with one leg crossed over the other, one ankle resting on your other knee. Put your index finger directly under the medial ankle, then turn your foot to look at its sole. The tendon should pop into your fingertip from just below the malleolus as you plantarflex and invert. You can follow the tendon up behind the tibia, but it disappears under the soleus a few scant inches up the shin. Palpating directly behind the tibia above this point often reveals an area of stored pain, indicating chronic over-contraction (in either eccentric or concentric loading, depending on the sub-talar joint posture) and misuse of this postural muscle.

In the fourth hour position, side-lying with the upper thigh flexed, you can explore into this line that tracks along just behind the tibia, deepening your work from spreading the crural fascia into affecting this deep compartment.

A better way to mobilize this compartment more completely is to go in behind the tibia with one hand, and behind the fibula with the other. Although this can be done with the client side-lying, it is easier with the client supine. The proper positioning for the medial hand is with the fingerpads touching the posterior surface of the bone with a strong finger grip, fingertips heading lateral. The lateral hand comes in behind the density of the lateral fibularis compartment, tracking the septum between the fibularii and soleus, fingertips coming medially and slightly forward. If the leg is not too closed, you can feel the posterior edge of the fibula, and this is your goal.

Connect your two sets of fingertips through this compartment, across the back of the bones and bring the interosseous membrane into your kinesthesia as well. This can be done with a short strap (such as a yoga bent) around both wrists to work against, or with the elbows wide and wrists straight to engage your pectorals in the task at hand.) Both the fascial walls fore and aft—the interosseous membrane and the transverse septum that separates Tom, Dick, and Harry from the soleus—are involved.

You can reach into this primal area in any of three client positions: Supine with the leg out straight (using plantar and dorsi-flexion or foot circumduction, depending on the pattern you are trying to correct) or supine with the knee up (in which case you can sit on the ball of the foot and ask the client to lift and lower the heel while you mobilize the compartment).

The third and easiest position is prone with the knee flexed to 90 degrees. Rest their foot on your shoulder or simply have them hold it up, and find your position behind the bones, and move tableward (superior) as they move the foot. If you start with this position, you will want to follow up with one or both of the supine positions to help move your work up the leg toward the trunk, but the prone position can be a good way to get some motion into this often-fixated and sensitive area.

It is hard to avoid having your initial approach to this area being anything less than 'sensationful' (our euphemism for painful) when first you get your fingers into it. The results are worth the intervention, so just work slowly, with client participation, but do not shrink from opening this important and deep foundation to the core.

Once engaged, whatever the position, the hands can move differently depending on the client's pattern. Put simply, with an inverted foot, move the medial tissue down and the lateral tissue cephalad. In an everted foot, the inner hand moves tissue up, while the outer hand brings the fibularii compartment fascia down. Keep your hands opposite each other across the lower leg; with the amount of pressure you need to exert to affect these tissues, you do not want one hand near the knee while the other is creating shear stress down at the ankle.

That said, the attention connection through the middle is everything for this technique; physical strength is secondary. Working only on the superficial aspect of the leg will not give you much satisfaction, while getting in to work effectively with this hidden area can give your clients a new walk.

Psoas Minor

Travell gives a psoas minor to 51% of the population. [17] On the basis of fewer dissections and a lot less science, but with more than thirty years of palpating thousands of psoas complexes, I posit that nearly 100% have the psoas minor strap, a fascial tendon that connects the upper lumbar spine (and the diaphragm) to the suprapubic ramus. Like most anomalous muscles such

as the scalenus minimus or fibularis tertius, whether that strap gets filled with muscle or not rests on genetics or embryological biodynamics or as yet unmeasured use patterns, but the fascial potential for this muscle is palpably present, or so I feel it, along the front of the psoas major in nearly everyone.

The psoas minor blends into the psoas major and the diaphragm at it superior end, and connects, via the lacunar ligament, with the pectineus at its lower end at the suprapubic ramus. The two muscles together form a set of 'locals' that, by spanning from the lesser trochanter to T12, recapitulate the psoas major 'express' that lies just lateral to them.[18] You can feel this complex for yourself by going into a deep lunge with the leg laterally rotated. As the hip nears the floor, you will feel the stretch in the pectineus and up along the front of the psoas in the form of the psoas minor.

Certain muscles have been discovered to have far more muscle spindles than the average. The muscles that move the eye and the sub-occipital group are obvious examples, but the plantaris has recently been found to be one of these highly-innervated muscles as well and seems to function as a highly receptive and responsive tension-adjuster to the Achilles tendon.[19] Although I can find no research on the subject, I suspect the psoas minor will turn out to be another of these highly innervated tuners, capable of adjusting the whole psoas complex in response to certain stimuli. If this hypothesis is true, then we do well to give some attention to this small and anomalous muscle whether it is fully there or not.

Although this muscle can be palpated on the front surface of the psoas in any of the positions SI practitioners use in order to gain such access, the initial contact is easiest to make with the client supine. With the client's knees up and feet standing, find the very front of the psoas, a bit medial of the ASIS on either or both sides. Have the client lift their leg off the table, so that the psoas becomes sharp and solid under your hand. Feel for the 1 cm (or less) ribbon of the psoas minor tendon coming up the inside of the tube of the psoas, but resting along the front for the majority of the muscle you can reach.

Once you have located the slick, palpably denser but thin strap running down the front of the psoas, get the client to tuck the pelvis into posterior tilt. Some coaching is necessary to get them to inhibit the belly muscles, so that they are not pushing you out by working their abdominals, but using psoas minor and the upper fibers of the psoas instead. This is an especially good re-coordinating assisted exercise for the anterior tilt client.

For an even more functional exercise for the psoas minor, sit the client on a bench with their back to the wall. Kneeling in front of the bench, find again the front of the psoas and the psoas minor tendon, pinning or holding it into the major. The lordotic client should be told to slowly and progressively flatten their back against the wall and slide the back of their head up the wall, while the flat-backed client can arch, moving the pubic bone down and the back of the diaphragm up. Either of these moves will have more effect on pelvic and spinal neutral than we have any right to expect from so small a muscle, hence the speculation that this may be another one of those 'tuners', like the sub-occipitals are for the entire erector spinae and the plantaris is for the complex pulls of the triceps surae on the soleus aponeurosis and the elastic Achilles tendon complex.

These are just a few points of departure for the practitioner seeking a deeper experience within the fascial web. All these muscle 'zip codes' (I like to think of muscles as zip codes within the fascial field) are for small, harder to locate, but nonetheless important structural and functional elements. As we become more familiar with the main highways of the recipe, we get time to explore some of its more interesting and obscure country roads.

Notes

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