

## Muscle Memories

### The Quadratus Lumborum "Pain that is devastatingly urgent"

On any given day there are seven million Americans off work as a result of low back pain. **After the common cold, back pain is the number one reason for visits to medical doctors.** When considering the cost of medical care along with disability costs, **it becomes the most expensive "disease" in America. Yet, despite its prevalence, there is no clear agreement on causation or treatment among medical and health care professionals.**

Interesting theories on low back pain abound. It's the spinal ligaments, the postural fascia, the bulging disks, the trigger points, the core instability, secondary gain, tight muscles, weak muscles, the sacroiliac joint or even the repression of infantile narcissistic rage!

There is probably an element of truth in all of these theories, but a more important question also remains unanswered: Why is the vast majority of all back pain episodic? In other words, why is it recurrent? Why does it keep coming back? Why does back pain seem to come and go regardless of our theories, our treatments, and our many, many approaches to obtaining a cure?

One of the more intriguing physical medicine theories is that the fundamental imbalance between postural and phasic muscles in and around the pelvis, perpetuates imbalance, strain and altered movement patterns, which accounts for the **injuring of these key structures. Thirty-three muscles attach the pelvis** and when primary relationships between agonists and antagonists become altered, there is postural distortion and painful movement patterns.

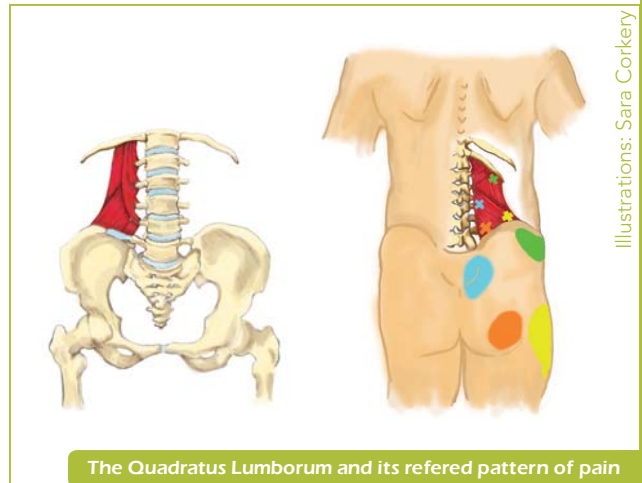
Virtually all practitioners within physical medicine agree that the quadratus lumborum is a vitally important muscle for pelvic stability, structural alignment and functional efficiency. Indeed the quadratus lumborum "may be the most overlooked source of low back pain," according to Doctors David Simons and Janet Travell.

Attaching superiorly to the 12th rib and the transverse processes of L1 to L4, and inferiorly to the posteromedial iliac crest and iliolumbar ligament, the quadratus lumborum has as some of its major functions:

- Lateral flexion of the spine
- Elevation or hiking of the ipsilateral hip when the spine is fixed
- Bilateral extension of the spine
- Stabilization of the 12th rib during inhalation and forced exhalation

Quadratus lumborum is usually bilaterally hypertonic in clients with an anteriorly tilted pelvis or the lower crossed syndrome. In lateral pelvic tilt or functional scoliotic patterns it is most likely hypertonic on the side of the elevated hip.

Quadratus lumborum muscle pain is usually deep, cryptic and aching, but may be lancinating during movement. In severe cases it may prevent clients from standing or walking, and its "devastatingly urgent" pain may necessitate moving on the hands and knees until relief is obtained. Many clients claiming "my back goes out" actually have bilateral quadratus lumborum spasm which has a paralyzing effect on weight bearing movement.



Illustrations: Sara Corkery

Trigger points from quadratus lumborum are especially interesting for the manual therapist. **The greater trochanter, the ischial tuberosity and the sacroiliac joints are three of the main referral pain regions from the quadratus lumborum** (see attached drawing). Over the years I have encountered many clients who either thought they had, or were diagnosed as having, sacroiliac joint dysfunction, trochanteric bursitis or hamstring tendonitis only to have the condition completely clear up with two or three sessions of neutralizing quadratus lumborum trigger points and restoring normal resting length to the muscle. I often wonder if many so called disk, joint or ligament problems are really quadratus lumborum trigger points in disguise. Doctors Travell and Simons certainly suggest that this is often the clinical reality.

Combination movements often overload the quadratus lumborum. For instance, **the combination of bending and twisting while getting out of a car or lifting a child or a dog off the floor can be an overlooked causal factor for pain and spasm, especially if there is a pre-existing muscular imbalance around the pelvic, abdominal or lumbar regions.**

Other activities that produce quadratus lumborum hypertonicity and pain include: ►

## Myofascial Release of Quadratus Lumborum

Stand perpendicular to your side-lying client. Thoroughly warm and release the oblique musculature with kneading, friction and light compressions. Utilize the olecranon process at a 45 degree angle of entry between the iliac crest and the 12th rib. Coordinate your depth with your client's respiration, gradually engaging the lateral border of quadratus lumborum. Slowly angle your elbow superiorly toward the 12th rib, lingering on areas of tension and hardening. Explore the lower attachment by gently shifting your pressure toward the iliac crest. Allow your client's breath to lift and lower your point of contact. Be certain not to press straight down, potentially bruising soft tissue against the lumbar transverse processes. Spend 5 to 7 minutes thoroughly melting troublesome areas.

Performed with accuracy and slow, conscious engagement, this method of myofascial release can generate tremendous physical relief from chronic low back pain.



Photo by Sara Corkery

- ◀ · Moving furniture in a clumsy or off balance fashion
- Washing an uncooperative dog in a bath tub
- Lifting heavy packages out of a car
- Coming up suddenly from a hammock or bucket style chair
- Asymmetrical gait during running or walking or twisting movements while doing household chores

Any position of sustained torso flexion combined with sudden or off balance extension or twisting can be hazardous for clients at risk for myofascial strain and imbalance. Even simple activities such as reaching for the soap in the shower, picking up the morning newspaper or doing the dishes can trigger overload of the quadratus lumborum, especially if there is an existing imbalance of key postural muscles.

In treating quadratus lumborum hypertonicity and trigger points, appropriate pressure, precision and penetration is vital. Attachments, fibrosis, stuck fibers and tender spots must be identified and released. Fascial investments surrounding quadratus lumborum must be softened before deep work is performed.

The accompanying photograph presents an interesting and highly effective method for releasing an angry and hypertonic quadratus. Developing skill and precision when releasing this low back troublemaker will greatly enhance your clinical results.

Best wishes for successful therapeutic outcomes! 🍵

Do you have a favorite muscle you would like to see analyzed in an upcoming issue of Deep — Massage Therapy Review? Let us know and we will feature that particular muscle and present effective massage therapy techniques to enhance your hands on skills. — bob@deepmtr.com

## What's Happening

### Consumer Reports' Survey Supports Hands On Therapies

In its August 2005 edition, Consumer Reports magazine, with a circulation base of more than four million, published the results of a survey of more than 34,000 readers on the effectiveness of conventional and alternative therapies for major health conditions.

Deep tissue massage ranked first in clinical effectiveness in treating both fibromyalgia and osteoarthritis. Massage also ranked second only to chiropractic in terms of effectiveness for neck and back pain. Nearly three fourths of the respondents reported massage either "helped me feel much better" or "helped me somewhat." By any interpretation, the survey was a ringing endorsement for the clinical efficacy of therapeutic massage. It finished far ahead of other modalities such as physical therapy, over the counter medications, exercise, and acupuncture.

The survey was not a classic research study, but it did constitute one of the largest respondent bases for public feedback on the clinical efficacy of alternative treatments. Well-known and heavily promoted herbal treatments such as St. John's Wort and echinacea did not work well for the readers.

Claiming "hands-on therapies are the stars of the alternative medicine show," the magazine also reported that chiropractic and deep tissue massage ranked ahead of all conventional treatments, including prescription drugs by readers with back pain! 🍵