# A NEW HARBINGER SELF-HELP WORKBOOK

# The Trigger Point Therapy Workbook SECOND EDITION

YOUR SELF-TREATMENT GUIDE FOR PAIN RELIEF

Clair Davies, NCTMB with Amber Davies, NCTMB

Foreword by David G. Simons, MD, coauthor of *Travell & Simons' Myofascial Pain and Dysfunction:* The Trigger Point Manual

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#### Massage Technique

When it comes to doing massage the right way, there are two overriding issues: safety and effectiveness. You have to be able to do massage without straining and exhausting the muscles in your forearms and hands and you have to do it in a way that will actually have an effect on a trigger point.

Table 3.1 lists nine principles of safe, effective, self-applied trigger point massage. These rules define the basic massage stroke that is used everywhere on the body. Massage of a given trigger point should be relatively brief, no more than fifteen or twenty seconds. When you've done that much, stop and move on. That constitutes a treatment. It's not necessary to do more. Doing more may actually be counterproductive. A basic tenet of medicine is that you can only create conditions that promote healing. The body itself is the healer. You must trust your body's natural processes to respond and do their job.

Impatience will tempt you to try to kill the trigger point, to rub it out. That's a normal impulse, but it's not the best therapy. Never try to force a release. Trigger points release on their own when they get frequent daily treatment that follows the guidelines given below. You will be surprised at how well this simple routine works. Treatment failures are usually the result of being too aggressive or simply treating the wrong spot.

#### Table 3.1 Massage Guidelines at a Glance

- 1. Use a tool if possible and save your hands.
- 2. Use deep stroking massage, not static pressure.
- 3. Massage with short, repeated strokes.
- 4. Do the massage stroke in one direction only.
- 5. Do the massage stroke slowly.
- 6. Aim at a pain level of seven on a scale of one to ten.
- 7. Limit massage to six to twelve strokes per trigger point.
- 8. Work a trigger point six to twelve times per day.
- 9. If you get no relief, you may be working the wrong spot.

#### Deep Stroking Massage

Established practice in therapeutic massage dictates that you press and hold trigger points for a specified number of seconds, or until they presumably "release." This is known as ischemic compression. You literally squeeze the blood out of the tissue. The trouble with pressing and holding a trigger point is that it can become unnecessarily painful if the goal is to make it release. It also requires a sustained contraction of the shoulders, arms, and hands of the person doing the therapy, which can become extremely tiring in a very short time. Massage therapists who use ischemic compression as trigger point therapy very often have constant pain in their arms and hands. This is one of the serious ergonomic hazards causing such a large turnover in the profession. The burnout time for massage therapists averages

about three years. As you can see, you must do massage safely or you'll end up with more trouble than you started with. Fortunately, there's a much safer and more effective way to deactivate trigger points.

Instead of the static pressure of ischemic compression, it's altogether better to make a series of strokes across the trigger point nodule. This gets results quicker and with less irritation to the trigger point, less damage to your hands, and less risk of bruising the skin and muscle. In addition, a moving stroke, frequently repeated, elicits a greater change in a trigger point than static compression.

Compressing the trigger point is the right idea, but a repeated "milking" action moves the blood and lymph fluid out more efficiently. The lymph contains the accumulated waste that has been generated by the continuously contracted muscle fibers. Picture how you rinse out a dirty cloth. Wetting and wringing it out only once won't get it clean no matter how long and hard you twist it. You need to run fresh water through it over and over until the water wrings out of it clear. A similar process works best with a trigger point.

Another advantage of using the short, repeated stroke instead of static pressure is that intermittent pain is easier to tolerate than continuous pain. Intermittent moving pressure allows you to go deeper and evoke just a little more pain than you could stand if you just pressed a trigger point and held it. Work deeply and slowly, using very short strokes, and no more than one stroke per second. The massage stroke doesn't need to be more than an inch and a half long. It only needs to move from one side of the trigger point to the other. Rather than sliding your fingers across the skin, move the skin with the fingers. This will help free up the underlying fascia, the thin membrane that envelopes muscles and whose tightness is sometimes part of the problem. Work deeply, mashing the trigger point against the underlying bone. Release at the end of the stroke, then go back to where you started, reset your fingers, and repeat. Each time you release the pressure, fresh blood immediately flows in, bringing a renewing charge of oxygen and nutrients. The trigger point has been deprived of these essential substances because pressure from the knotted-up muscle fibers has been constricting the capillaries that supply them.

Although you'll hear that you should always move the fluid toward the heart, it's not a critical issue here, because so little fluid is being moved. Stroke in whatever direction feels best. If you don't make trigger point therapy as easy as you can, it will wear you out and you won't want to do it.

Another benefit of the deep stroking massage is that it helps get the stretch back into the muscle fibers within the trigger point. Picture what would happen if you applied deep, stroking massage to a ball of modeling clay. It would spread and lengthen in the direction you pushed it. The effect on the muscle fibers is similar, just not as dramatic or as visible. Think of this as a microstretch, as opposed to the macrostretch of the whole muscle that you do with conventional stretching exercises. The microstretch is applied directly to the trigger point, right where it's needed. Done this way, there's little chance of overstretching the taut bands of muscle fibers that lead from each side of the trigger point to the muscle's attachments at the bone. Abuse of this taut band risks irritating the trigger point and making it hold on tighter.

#### Hurting Good

Trigger points hurt when compressed, and you may be very reluctant to work them for fear of doing yourself harm or making your pain worse. You have to realize that pain

# Trigger Point Guide: Head and Neck Pain

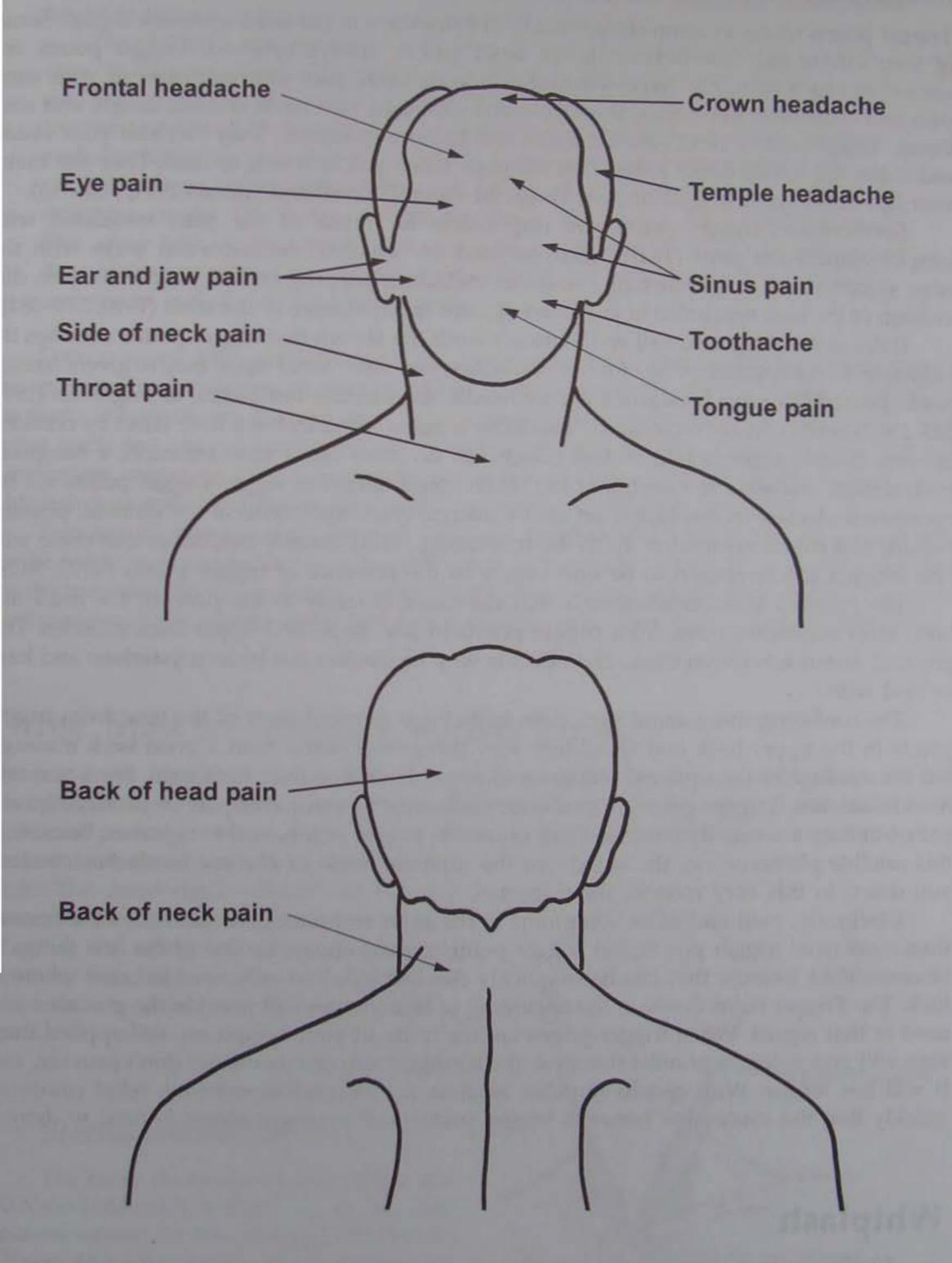




Figure 4.32 Masseter massage with thumb and fingers (thumb inside the mouth)

Trigger points can be found at any place in the masseter, from the cheekbone to the bottom edge of the jaw. Massaging the masseter from outside the mouth with supported fingers is good therapy (see Figure 4.47). To work the masseter most effectively, however, it's necessary to put your thumb inside your mouth and knead the muscle between thumb and fingers (Figure 4.32). The masseter feels very firm, thick, and rubbery. If you're working the right place, you'll feel the tip of your thumb touching the coronoid process, the sharp-edged, fin-shaped piece of bone rising from near the back of the jawbone.

Seek out each exquisitely tender knot, from the cheekbone to the bottom of the jaw, and massage it as strongly as you can bear. Massaging the masseters is extremely painful when they're afflicted with trigger points, and you should expect to experience soreness

afterward for a day or two. This residual soreness only indicates how badly the muscles need the attention. Don't let the discomfort make you give up. Work on them every day until squeezing the muscle no longer hurts.

You can go a long way toward preventing trouble with the jaw muscles by giving up chewing gum. In addition, avoid biting your nails, don't chew on ice, and don't open things with your teeth. Find out what you can do to stop grinding your teeth in your sleep. Train yourself not to clench your jaws when you're tense and under pressure. See chapter 12 to learn more about reducing habitual muscle tensions.

#### Pterygoid Muscles

The pterygoid (TEHR-uh-goyd) muscles are well hidden by the lower jawbone, which is very inconvenient, since their trigger points are a frequent cause of pain in temporomandibular joints of the jaw. The word pterygoid comes from the Greek for "winglike," a

reflection of their shape. The root word is similar to that of "pterodactyl," the name of the winged dinosaur.

The medial pterygoid muscle causes pain in the temporomandibular joint and the ear, which increases when you bite down on something (Figure 4.33). It can also refer pain to the back of the mouth, hard palate, and tongue and can make it hurt to swallow. Medial pterygoid trigger points make it difficult to open the mouth wide. A sense of stuffiness in the ear can come from a tight medial pterygoid when it prevents the eustachian tube (in the middle ear) from opening. This may occur because of referred effects on the tensor veli

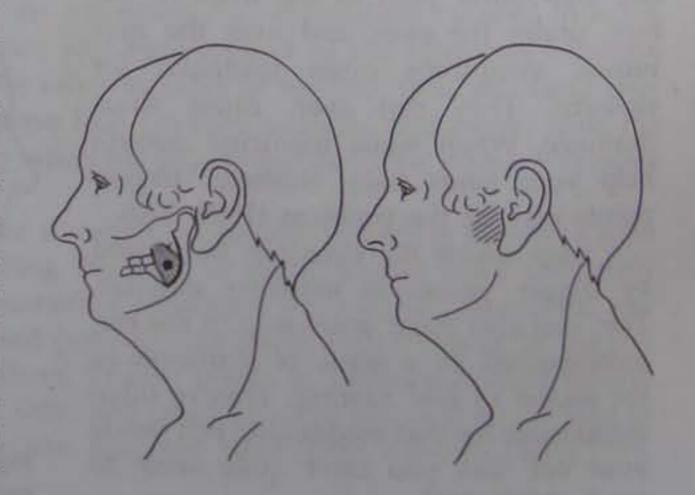


Figure 4.33 Medial pterygoid trigger point and referred pain pattern

palatini and salpingopharyngeus muscles in the back of the throat, which have more direct control over the eustachian tube. The medial pterygoid muscle helps close the jaw. Its problems are therefore strongly associated with those in the masseter (1999, 365–366; Bell 1969, 154–160).

You can massage the medial pterygoid by pressing up with your thumb inside the inner edge of the back of your lower jaw (Figure 4.34). This can be an exceedingly painful spot. As with the masseter, massage of the pterygoids can leave you sore, so go easy at first.

The other pterygoid muscle, the *lateral pterygoid*, is the number one myofascial source of pain and temporomandibular joint (TMJ) dysfunction (Figure 4.35). Constant trigger point–generated tension in the lateral pterygoids tends to pull the lower jaw forward and disarticulate, or partially dislocate, the joint. Popping or

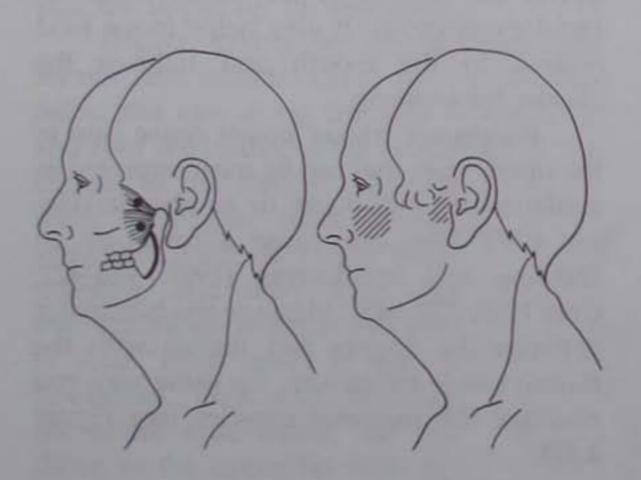


Figure 4.35 Lateral pterygoid trigger points and referred pain pattern

This author, who suffers from tinnitus, has not found that massage of these muscles has any ameliorating effect on tinnitus. The key muscle may be the lateral pterygoid, which is very well hidden by the jawbone, making it much less accessible to the finger than to the needle. The function of the lateral pterygoid muscles is to help the digastric muscles open the jaw. As a consequence, trigger points are created in the lateral pterygoids when you have trouble breathing through your nose and must keep your mouth open in order to breathe. Satellite trigger points set up in the front of the face by the lateral pterygoids may account for much of the face pain that comes with allergies. Major dental work that stresses jaw muscles by requiring you to hold your mouth open for long periods of time can be the unsuspected cause of long-term chronic pain in the face and jaws. Trigger points in masseter and temporalis



Figure 4.34 Medial pterygoid massage with thumb

in the jaw is the result of this displacement (1999, 383; Reynolds 1981, 111–114; Marbach 1972, 601–605).

As with the masseter, trigger points in the lateral pterygoid refer pain to the cheek, mimicking sinus pain. They can also stimulate sinus secretions. Many "sinus attacks" are simply the effects of lateral pterygoid trigger points (1999: 383).

Travell and Simons link tinnitus (ringing in the ears) to trigger points in the sternocleidomastoid, masseter, and lateral pterygoid muscles. They quote studies showing that trigger point injection can com-

pletely relieve the condition.

clicking



Figure 4.36 Lateral pterygoid massage with index finger in mouth

#### Trigger Point Guide: Shoulder, Upper Back, and Upper Arm Pain

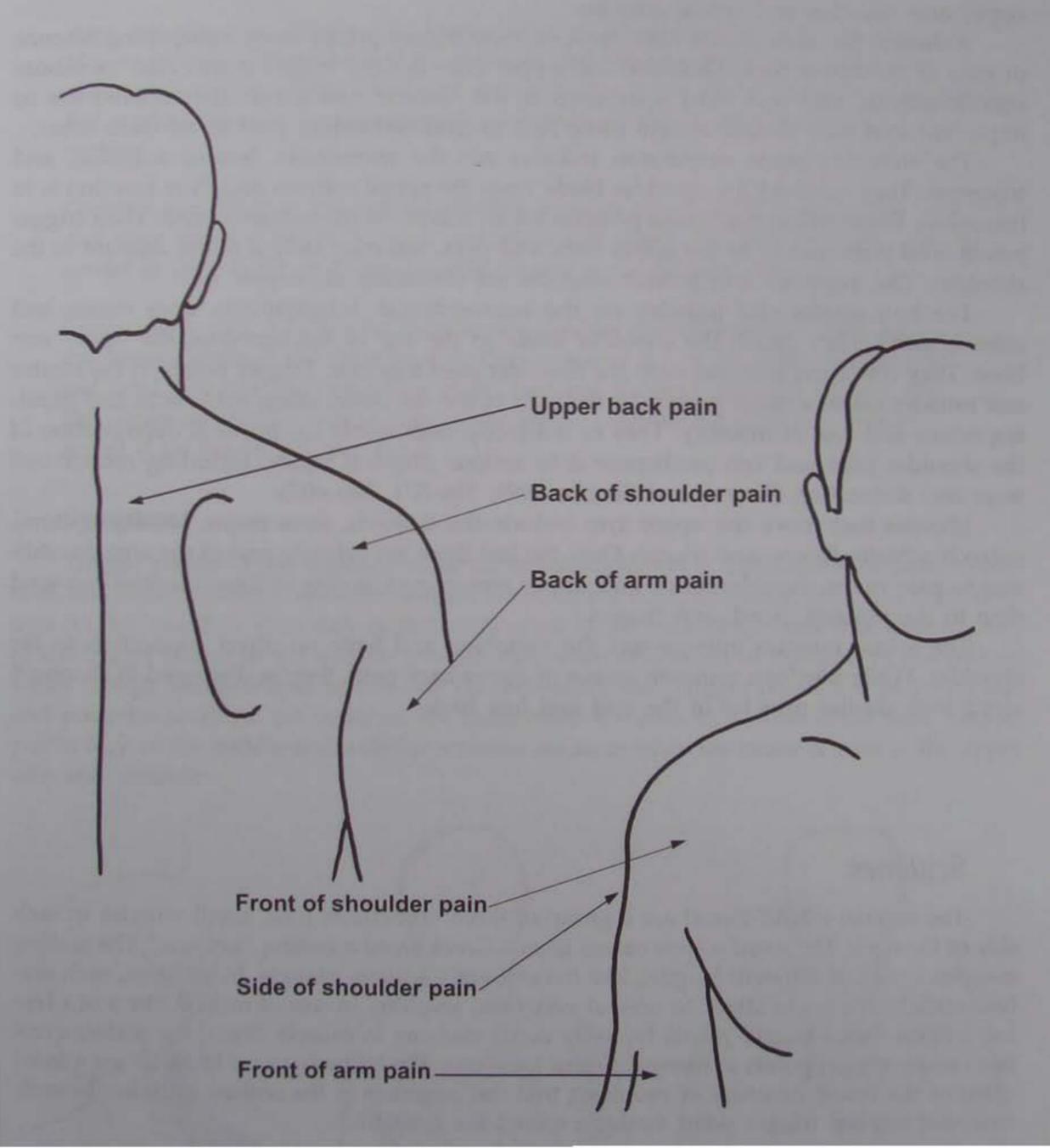




Figure 5.10 Locating the superior angle of the shoulder blade

shoulder that suggests the presence of this bony ridge beneath the skin. See if you can find and trace it with your fingers.

Just above the scapular spine, feel for the bony superior angle (A) of the shoulder blade (Figure 5.10). This is an important landmark for locating the supraspinatus, one of the rotator cuff muscles. Under your arm at the edge of your back, you should be able to feel the lateral border (C) of the shoulder blade. Trace it down to the lowest point of the shoulder blade, the inferior angle (D). If your range of motion isn't hampered by shoulder pain, try reaching all the way across to touch the inner edge of the shoulder blade, the medial border (B). Otherwise, try to touch the upper part of the medial border by reaching over your shoulder.

Take some time to learn the terms for the different parts of the shoulder blade. It will aid your

comprehension of the discussion of the individual muscles and, ultimately, your ability to successfully treat your trigger points. Sooner or later, you will want to talk to other people about these things, and it helps to know the right words instead of having to point and grunt.

## Upper Back Muscles

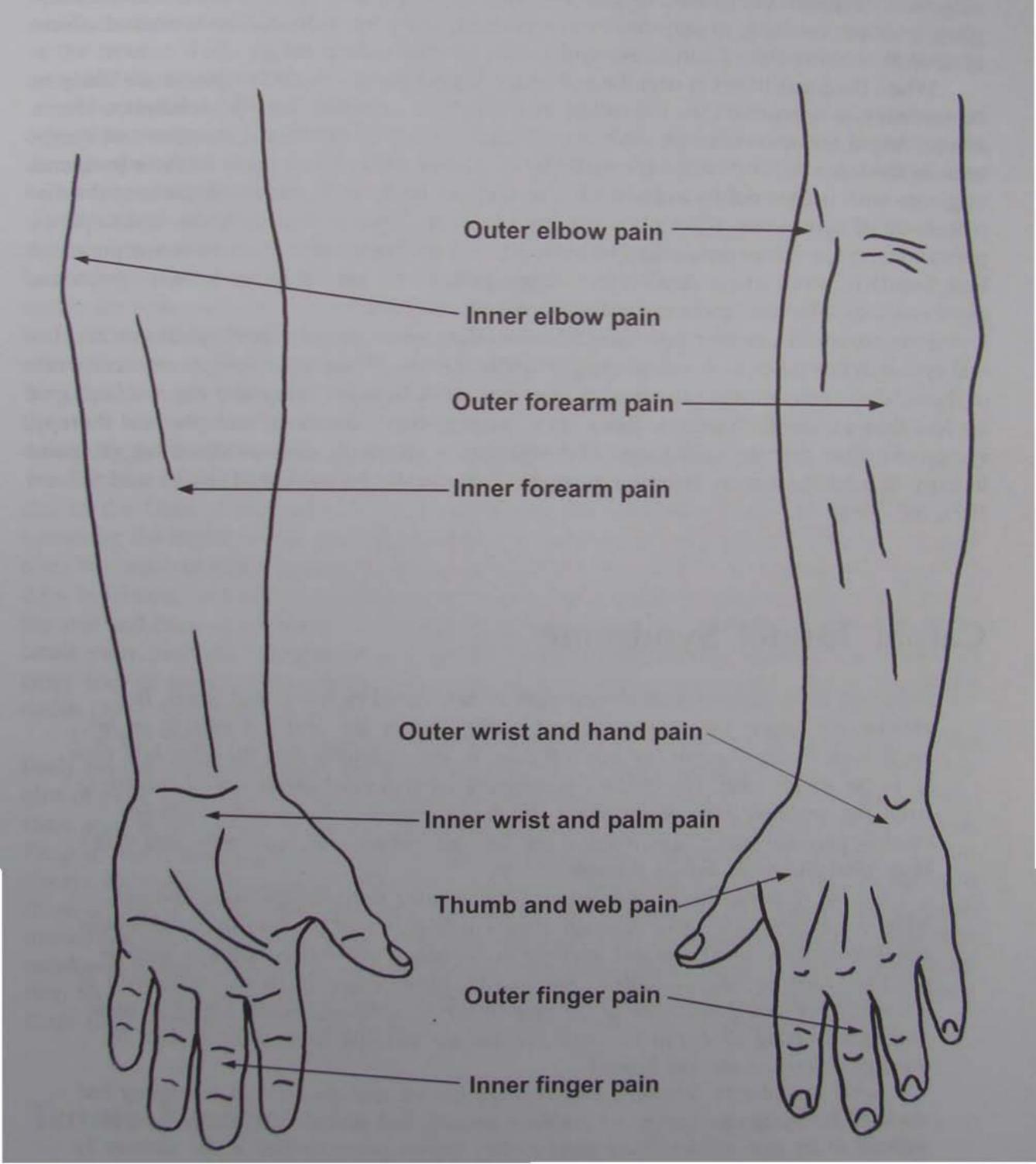
Putting muscles into logical groups is easy if you're viewing the question anatomically. All you have to do is decide the physical boundaries. When you try to group muscles according to the pain caused by their trigger points, it's like shuffling a deck of cards. Everything changes. This is why certain upper back muscles have ended up in other chapters in this book.

The trapezius and levator scapulae, though located in the upper back, are discussed in chapter 4 because their trigger points send pain mainly to the head and neck. The rotator cuff muscles are located in the upper back, covering both sides of the shoulder blade, but are considered as shoulder muscles because their trigger points send pain mainly to the shoulder. The upper spinal muscles, which do cause pain in the upper back, have been left to the chapter on the lower back and buttocks, because they're simply a continuation of the muscles in those parts of the body. Only three muscles fall into no other group but the upper back. They are the major and minor rhomboids and the serratus posterior superior.

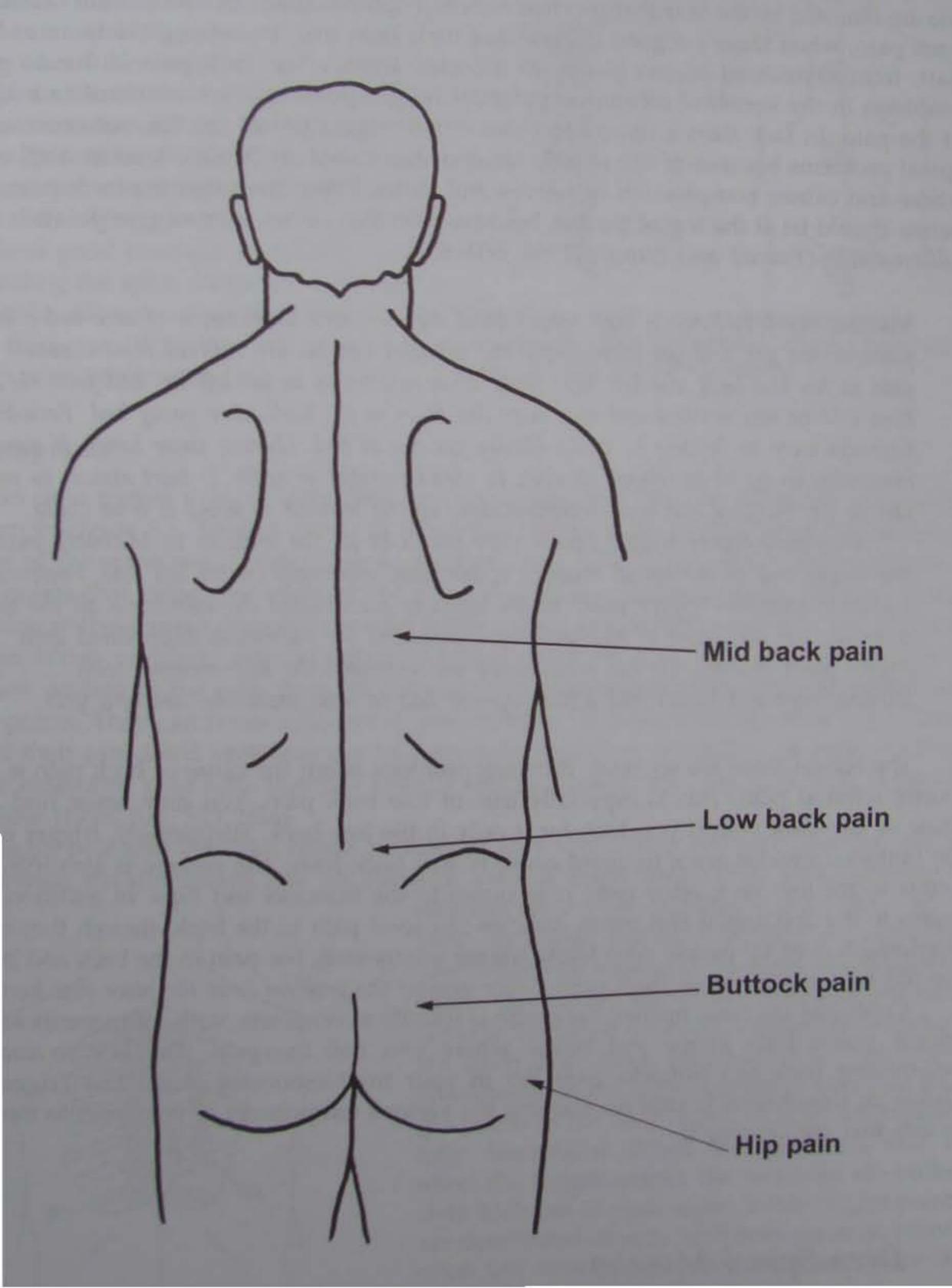
#### Rhomboids

The *rhomboid* (RAHM-boid) muscles attach to several vertebrae of the upper back and to the inner edge of the shoulder blade. The minor rhomboid is higher and somewhat separate from the major rhomboid, but the two are indistinguishable by touch. The function of the rhomboids is to move the shoulder blade toward the spine, to help raise the shoulder blade, and to hold the shoulder blade still when needed, as a solid support for the operations of the arm and hand.

## Trigger Point Guide: Elbow, Forearm, and Hand Pain



Trigger Point Guide: Mid Back, Low Back, and Buttock Pain



horrible damage to his spine. He'd been to the emergency room where he'd been given muscle relaxants and a painkiller; he'd been to the chiropractor twice. Nothing helped.

Three days after deep massage to his buttocks and low back muscles, Duane was walking erect with very little pain. His hips were free and the curve had returned to his back. He was sleeping, too. "If my back starts hurting in the night, I just reach for the tennis ball and work on it right there under the covers," he said. "Why didn't the doctor tell me about that?"

#### Symptoms

Pain from trigger points in gluteus medius muscles is felt in the low back just above and below the belt line and often extends into the buttocks and hips (Figures 8.19, 8.20, and 8.21). Back pain from this source can be excruciating and disabling, seriously undermining endurance. Pain in the hips can make it hard to find a comfortable sleeping position. Gluteus medius trigger points are a frequent cause of hip and low back pain in the later months of pregnancy. Pain in both the hips and low back can make walking almost impossible (1992, 150–151; Sola 1985, 683).

Afflicted gluteus medius muscles pull the rim of your pelvis down, stiffening and flat-

tening your lower back and adding to your disability. Chronic shortening of gluteus medius muscles caused by latent trigger points makes you stand and walk with your pelvis thrust forward (1992, 159).

The common assumption is that pain in the low back is caused by some problem in the lumbar spine, such as arthritis, a herniated disk, disarticulated vertebrae, a compressed nerve, or a sacroiliac joint dysfunction. X-ray evidence of these spinal abnormalities is often used to justify surgery for low back pain, although such abnormalities are often found in people who never suffer low back pain. Pain from

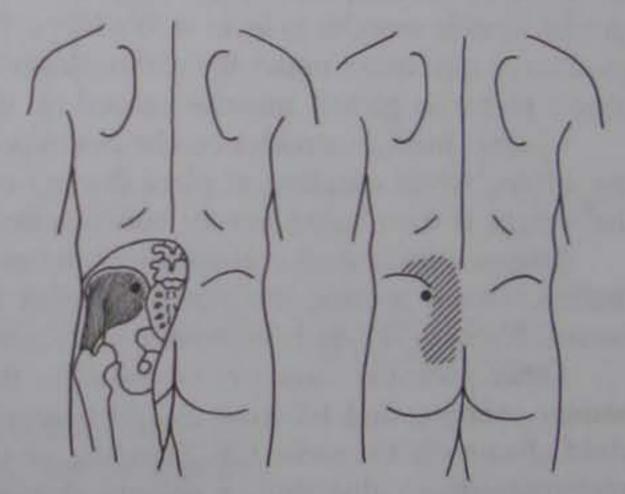


Figure 8.19 Gluteus medius number 1 trigger point and referred pain pattern

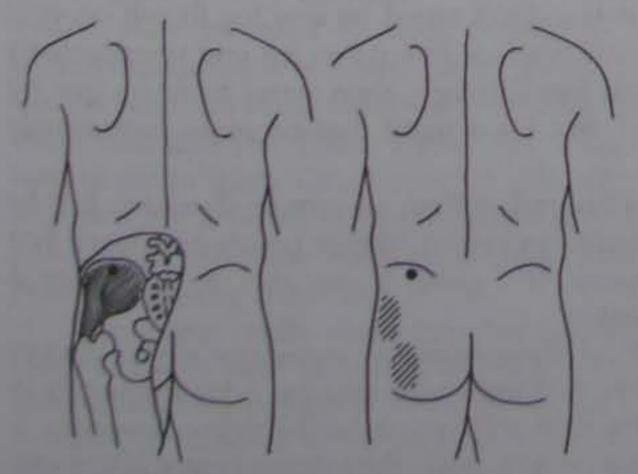


Figure 8.20 Gluteus medius number 2 trigger point and referred pain pattern

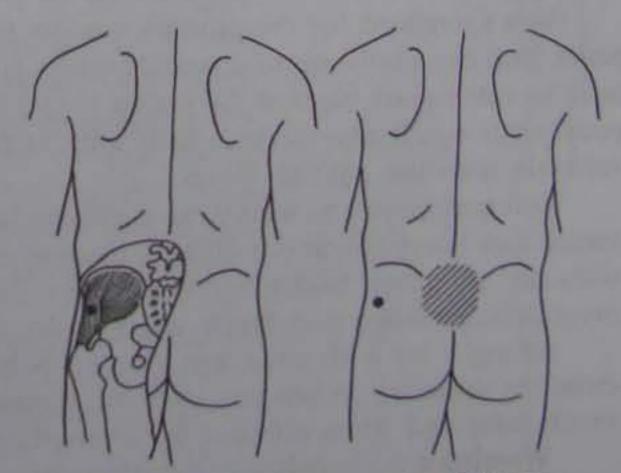


Figure 8.21 Gluteus medius number 3 trigger point and referred pain pattern

myofascial trigger points that remains after surgery can be greatly mystifying and frustrating to both doctor and patient. It's disturbing to think that trigger points may have been the only thing needing correction in the first place (1992, 154-155).

#### Causes

Although the gluteus medius is no more than half the size of the gluteus maximus, it's still a very thick, strong muscle, whose primary function is allowing you to walk upright. Each time you take a step, the gluteus medius muscle of the opposite hip contracts to keep the pelvis from tilting when you lift your foot. As you walk along, the gluteus medius muscles take turns supporting the entire weight of the upper body. Because of the leverage at the hip, gluteus medius muscles have to alternately generate a force equal to more than twice the

body weight.

Any additional demand or imbalance is compounded in this same way. For instance, consider that each pound of excess body weight adds two pounds to the workload of the gluteus medius muscles. You may have observed that heavy people often lumber or waddle, throwing their weight from side to side as they walk. This is the body's natural effort to protect itself by moving the weight fully over the leg with each step instead of requiring the gluteus medius muscles to lever it. Waddling may not look great, but don't knock it: it's pretty good body mechanics under the circumstances. Low back pain in pregnancy can be traced to trigger points in gluteal muscles caused by the stress of being temporarily "overweight."

Gluteus medius muscles can be overworked when you carry heavy weight while walking. Lifting while standing in place doesn't overtax the gluteus medius muscles, as long as

the weight is distributed evenly between both feet.

Trigger points in the quadratus lumborum can sponsor trigger points in the gluteus medius. This is because the gluteus medius lies in the referral area for the quadratus lumborum. It's wise to search for tender spots in both muscles when you have low back pain.

Other potential causes of overload in these muscles are weight lifting, running, falls, aerobic exercise, and habitual weight bearing on one side of the body, such as carrying a child always on the same hip. Standing or sitting still for long periods of time makes the gluteus medius vulnerable by encouraging stiffness. A common condition called Morton's foot can cause unstable foot placement, which can bring about trigger points in gluteus medius muscles (1999, 155-156). Morton's foot is discussed in detail in chapter 10.

As a safeguard for the gluteus medius muscles, don't stand on one leg to put on your pants. You can easily strain a muscle when you catch a foot in a pants leg and unexpectedly have to catch your balance. Sit down to get both feet through, then stand to finish pulling your pants up. It may seem a little silly at first, but it's a habit that becomes increasingly

valuable with the passing years.

You may prefer to take your injections in a hip rather than an arm or shoulder. Just be aware that injections into a gluteus medius muscle can set up trigger points and leave you with an annoying backache. When this happens, it's good to be able to recognize a myofascial problem and know what to do about it.

Sitting a lot with your legs crossed is bad for these muscles, especially if you always cross the same leg. When you exercise, remember that moderate exercise done frequently is much safer and more efficient for strengthening than infrequent hard-driving sessions.

Wearing a wide pelvic belt during strenuous activity and while doing heavy lifting can give the gluteus medius muscles enough extra support to prevent their being overstressed. A six-inch wide elastic band worn over the hips is perfect for this. A man's jockstrap is available in this width. A woman's girdle can also be useful for this purpose. Taking the precaution to wear such things can be the critical factor in warding off an unpleasant backache at the end of the day.

#### Treatment

The gluteus medius is under the gluteus maximus, attaching along the rim of the ilium,

the top of the hip bone. The other end attaches to the greater trochanter (tro-CAN-ter), the prominent lump at the top of the thighbone. Many muscles attach to the greater trochanter, because of the great leverage it gives for moving the thigh. This bony landmark sticks out on the side of your hip and you can locate it by feel. The relationship between the hip bone and the greater trochanter is shown in Figure 8.22.

To locate the gluteus medius, shift your weight to one foot while you feel for a contraction just below the top of the hip bone (Figure 8.23). The top of your hip bone may be a little higher in back than you may have thought; it can extend an inch or two above your belt line. You can also feel the gluteus medius contract just above the greater trochanter and

also feel the gluteus medius contract just above the greater trochanter and a little to the rear. This is where you can often find an especially bad gluteus medius trigger point overlying a common gluteus minimus trigger point. It's not unusual for all the muscles on one side of your buttocks to have trigger points at the same time.

Trigger points number 1 and number 2 in the gluteus medius may be hard to find, buried as they are under the gluteus maximus and some fat padding. Massage the gluteus medius with the same tools used with the maximus, namely the tennis ball and the Thera Cane. You may have to press fairly hard to get to them. Otherwise, try a lacrosse ball against a wall (Figure 8.24). A short, rolling stroke is most effective; continuous pressure can do more harm than good. Visualize *ironing* trigger points—pressing them flat.

For going really deep into the gluteal muscles, someone else's elbow is hard to beat. For this procedure, you lie on your stomach and the person with the elbow sits beside you. If you let a friend or relative work on you, be sure they either already understand the concepts outlined in this book or are eager (or at least willing) to learn.

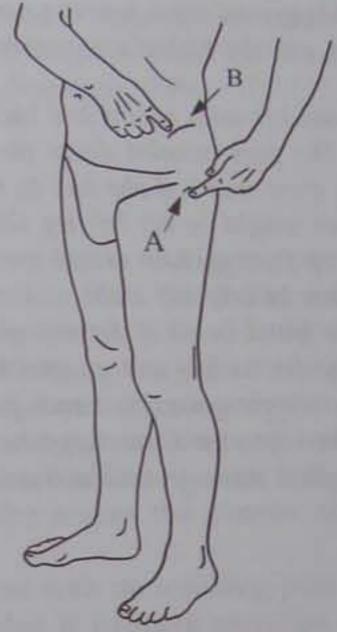


Figure 8.22 Feeling the greater trochanter (A) and the top of the hip bone (B)

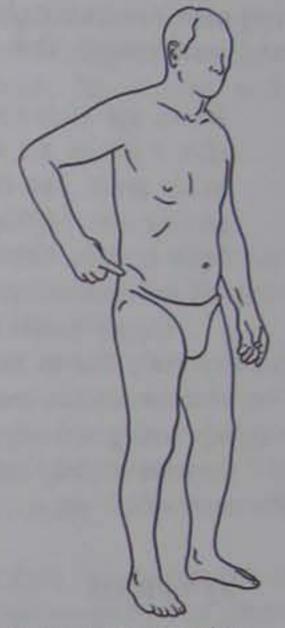


Figure 8.23 Locating gluteus medius by isolated contraction with weight shift to right foot

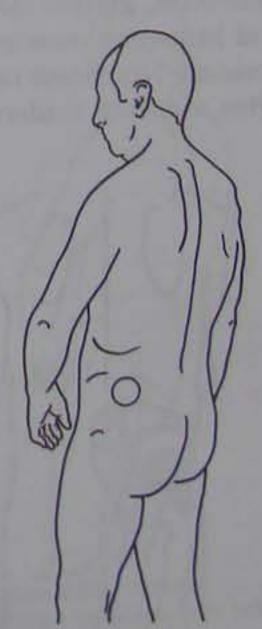
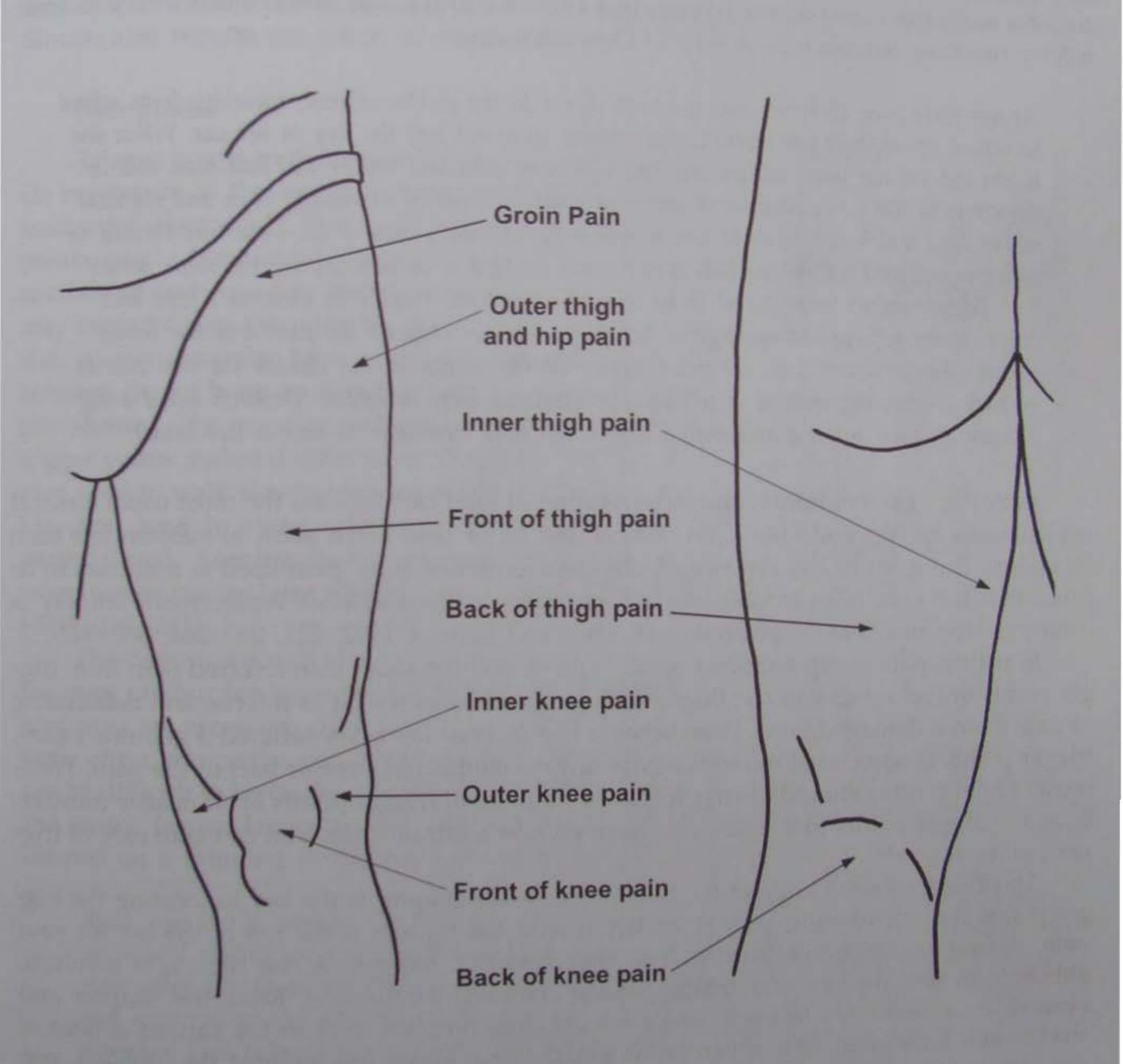
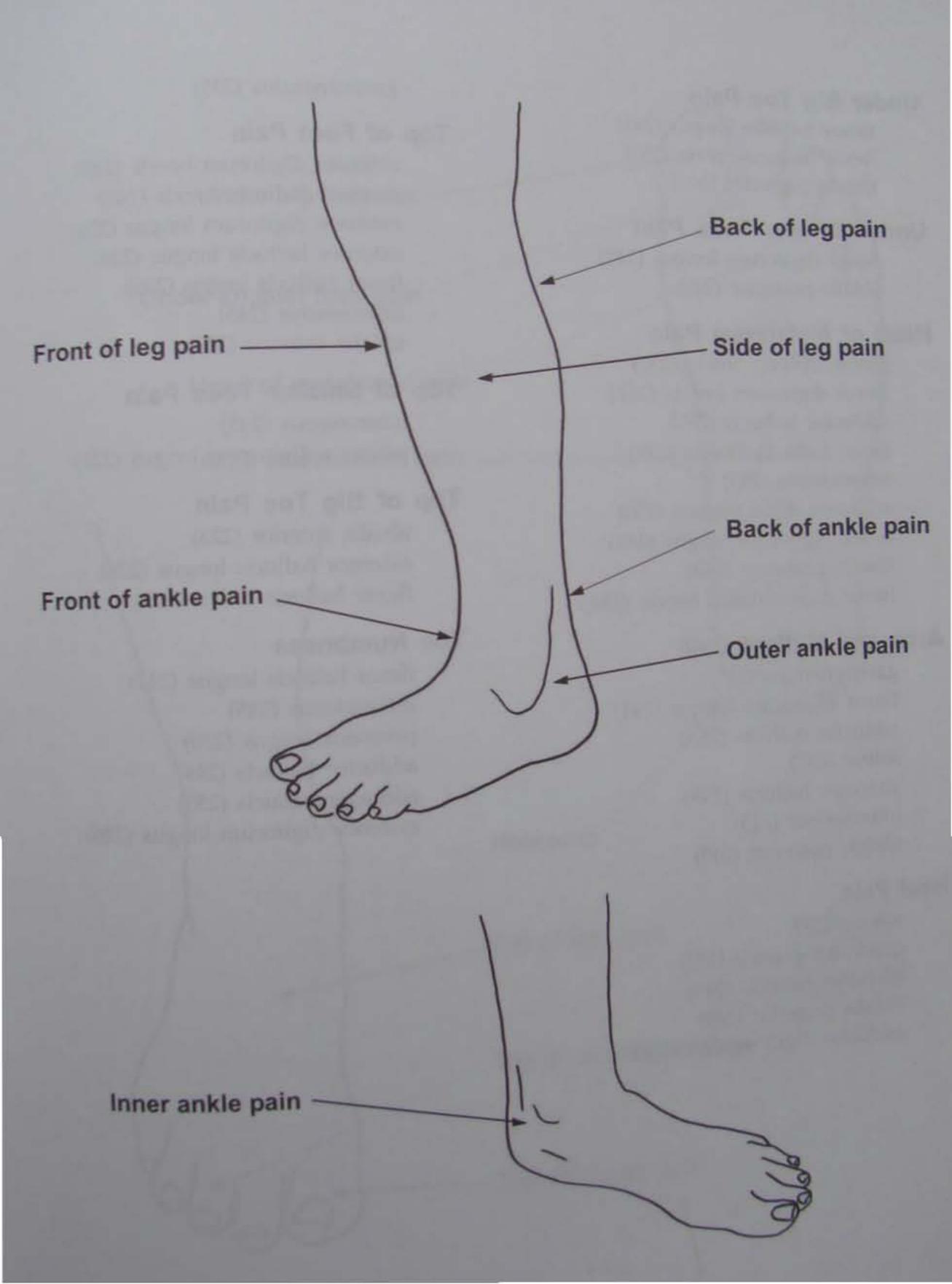


Figure 8.24 Gluteus medius massage with ball against the wall

# Trigger Point Guide: Hip, Thigh, and Knee Pain



# Trigger Point Guide: Lower Leg and Ankle Pain



# Trigger Point Guide: Foot Pain

