

Massage Therapy for Low Back Pain (Again)

Perfect Spot No. 13, The Most Classic Low Back Pain Trigger Point

Paul Ingraham • Nov 1, 2017 • 7m read



Trigger points (TrPs), or muscle “knots,” are a common cause of stubborn & strange aches & pains, and yet they are under-diagnosed. The 14 Perfect Spots ([jump to list below](#)) are trigger points that are common & yet fairly easy to self-treat with massage — the most satisfying & useful places to apply pressure to muscle. For tough cases, see the [advanced trigger point therapy guide](#).

Pain Location

in the low back, buttocks, hamstrings

Problems

low back pain, sciatica

Related Muscles

erector spinae muscle group at L5

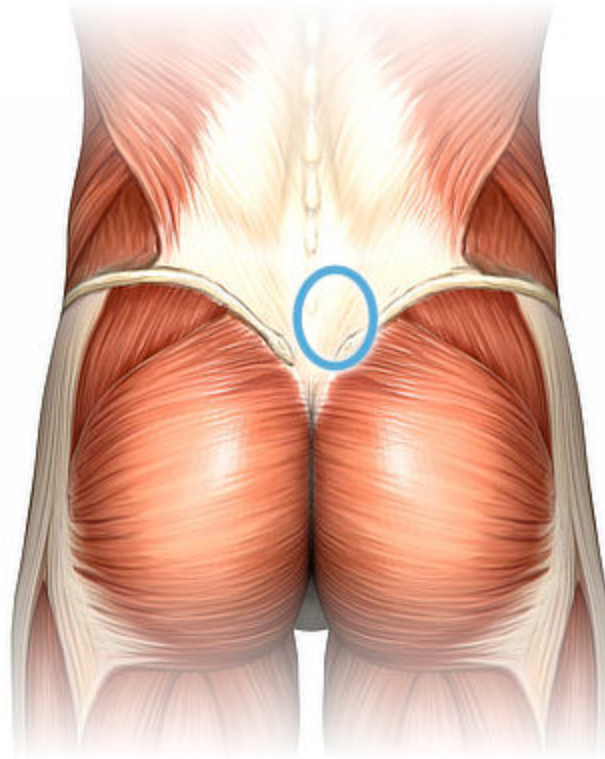
[“Big Red Books” Reference](#): Volume 2, Chapter 48

[see chart of all spots below](#)

Important! This article is meant for people with a minor low back pain. If you are having serious or chronic back pain, please start with: [The Complete Guide to Low Back Pain](#)

Some of the Perfect Spots are “perfect” because they are *surprising* — it’s delightful to find a place to massage, that feels highly relevant to your pain, in an unexpected location, like discovering that you *can* scratch an itch you didn’t know you could reach. Others are perfect because they are *exactly* where you expect them to be — and what a relief it is to be able to treat them. Perfect Spot No. 13 is perhaps the ultimate, the quintessential example of a trigger point that is usually “right where I thought the problem was”: in the “pit” of the low back, at the bottom of the thick columns of back muscle beside the spine.

How do you find Perfect Spot No. 13?



Perfect Spot No. 13 is easy to find. Think of the “pit” of your low back: the bottom of the back, as far down as you can go, right next to the spine, without actually crossing over into the pelvis. It is the lowest possible spot next to the spine that can still be called the back.

“Low back pain” is felt anywhere from the sides of the hips to the tips of the lower ribs. Perfect Spot No. 13 is at the geographic center of the possibilities, right between the back dimples.

If you press on the meaty column of muscle found on either side of the spine — the *lumbar paraspinal muscles* or the *erector spinae muscle group* — and follow it downwards, you will find that the last place where it feels thick and meaty is between the low back dimple and the spine. Go any lower and the muscle feels thinner as it tapers out and starts to turn into tendon and gristle over the surface of the sacrum.

Perfect Spot No. 13 is usually right beside the dimple, in the lowest thick segment of the paraspinals. It might also be found slightly higher, or slightly lower in the thinner tissue over the sacrum.

A more anatomical way to think of the location

There’s a diamond-shape layer of tough connective tissue across the entire low back, the thoracolumbar fascia. This structure may get thickened and stiff in people with back

pain. ¹ Perhaps not coincidentally, Spot #13 is right smack dab in the bottom tip of it, where it is sturdiest and “anchors” to the pelvis and lowest part of the spine.

What does Perfect Spot No. 13 feel like?

In most people with back pain, pressure on this spot feels like a deep, deep, *deep* dull ache that closely resembles any back pain or stiffness that you may have in the area. That is, pressure “reproduces” the quality of pain of many a back ache. ²

One of the reasons that I’ve nominated this trigger point to be a Perfect Spot is that, properly located and treated, it so reliably feels like scratching an itch — one of the best examples of that feeling to be found anywhere in the body.

This is a sturdy part of any back, assuming it’s not in some kind of serious trouble. For many people, mild and moderate pressure will not scratch the itch. It may take surprisingly firm pressure to trigger the feeling that makes you want to say, “Oh yeah, that’s it, right there!” If firm pressure causes strong and unpleasant pain, back off, of course: it’s not a perfect spot for *you*, and it’s even possible that your system is protecting itself from disturbance of a structural abnormality. ³

Confusion with Perfect Spot No. 12

If you’ve read the whole Perfect Spot series, you might notice that Spot 12 is rather close to this one. They are just on either side of the “divide” of the upper ridge of the pelvic, 12 in the gluteals, 13 in the low back, no more than an inch or two apart.

Almost anyone who likes pressure on one is going to crave it on the other (the “butt-back connection”). However, one of them usually feels more obviously like the epicentre of pain and/or stiffness in the region. Check both!

How do you treat Perfect Spot No. 13?

Start with thumbs — but this is deep muscle tissue, and often you (and your patient) are going to want to graduate to elbow. It’s an easy spot to press on with the elbow, and many people absolutely require a good portion of your body weight delivered in this way in order to get relief.

Sometimes pressure is best applied *straight downwards* onto the back muscles here. But for many people, the trigger point is better treated with a pressure that is direct partly downwards, and partly on an angle towards the spine. In some cases, you may even find that the best relief comes from attack the spot directly from the side, pressing horizontally into the very side of the muscle group, straight towards the spine.

The further you move around to the side, the more you generally have to navigate upwards (towards the head) a smidgen, which actually puts your point of contact *above* the low back dimple, as opposed to *between* the dimple and the spine. This is okay. Perfect Spot No. 13 is in there somewhere in that lowest section of lumbar paraspinal muscle; feel free to experiment with many angles. Anything within a few square centimetres down there counts as being Spot No. 13.

This is also a good spot for massage tools, because of the toughness of the tissue. A smaller, harder ball like a lacrosse ball is ideal. Start by pinching the ball between your back and wall, squatting a bit and leaning into it, and roll up and down and back in forth in short strokes.

A trigger point success story

Reader Alex B. send me a good anecdote about his rapid recovery from sciatica by treating muscles “knots” in his low back and upper gluteals:

Recently, seemingly overnight, I developed what appeared to be femoral neuropathy caused by a benign tumour (neurofibromatosis). I seemed to have some regular "sciatica" too. I spent months getting MRIs, going to chiropractors and physical therapists, with no relief. A surgeon told me to just accept that the tumour was the cause of the pain, but I didn't believe him: a giant neurofibroma could surely cause pain, but I figured it would have been a slow build rather than overnight.

Anyway, I finally found your website. Sure as shit, I did the perfect spot #12 and #13 for one night — just a single dose — and I was 95% healed. It's been 8 months since I could walk without a limp and I swear to god I am able to sprint again. I was doing flips into a pool this weekend!

I followed up with Alex a couple weeks later and confirmed that he was still doing well. Anecdotes are not evidence, of course, but stories like this are quite common in my experience.

About Paul Ingraham



Headshot
of Paul
Ingraham

I am a science writer in Vancouver, Canada. I was a Registered Massage Therapist for a decade and the assistant editor of ScienceBasedMedicine.org for several years. I've had many injuries as a runner and ultimate player, and I've been a chronic pain patient myself since 2015. Full bio. See you on Facebook or Twitter, or subscribe:

Appendix A: Is trigger point therapy too good to be true?

Trigger point therapy isn't too good to be true: it's just ordinary good. It can probably relieve some pain cheaply and safely in many cases. Good bang for buck, and little risk. In the world of pain treatments, that's a good mix.

But pain is difficult and complex, no treatment is perfect, and there is legitimate controversy about the science of trigger points. Their nature remains somewhat puzzling, and the classic image of a tightly "contracted patch" of muscle tissue may well be wrong. What we do know is that people hurt, and it can often be helped.

The Perfect Spots are based on a decade of my own clinical experience as a massage therapist, and years of extensive science journalism on the topic. Want to know more? This is the tip of the iceberg. I've written a whole book about it ...

Appendix B: Quick Reference Guide to the Perfect Spots

This index is also available on its own page.

1 For headache, neck pain

Under the back of the skull must be the single most pleasing and popular target for massage in the human body. No other patch of muscle gets such rave reviews. It has everything: deeply relaxing and satisfying sensations, and a dramatic therapeutic relevance to one of the most common of all human pains, the common tension headache. And no wonder: without these muscles, your head would fall off. They feel just as important as they are. (Click/tap heading to read more.)

for pain: almost anywhere in the head, face and neck, but especially the side of the head, behind the ear, the temples and forehead

muscle(s): suboccipital muscles (recti capitis posteriores major and minor, obliqui inferior and superior)

2 For low back pain

This Perfect Spot lives in the “thoracolumbar corner,” a nook between your lowest rib and your spine — right where the stability of the rib cage and thoracic vertebrae gives way to the relative instability of the lumbar spine. It consists of trigger points in the upper-central corner of the quadratus (square) lumborum muscle and in the thick column of muscle that braces the spine, the erector spinae. (Click/tap heading to read more.)

for pain: anywhere in the low back, tailbone, lower buttock, abdomen, groin, side of the hip

muscle(s): quadratus lumborum, erector spinae

3 For shin splints

Perfect Spot No. 3 is in your shins — seemingly an unlikely place for muscle knots! But there is meat there, and if you’ve ever had shin splints then you know just how vulnerable that meat can be. Even if you’ve never suffered so painfully, your shins probably still suffer in silence — latent trigger points in the upper third of the shin that don’t cause symptoms, but are plenty sensitive if you press on them. (Click/tap heading to read more.)

for pain: in the shin, top of the foot, and the big toe

muscle(s): tibialis anterior

4 For thoracic outlet syndrome, throat pain and tightness, chest pain

Deep within the Anatomical Bermuda Triangle, a triangular region on the side of the neck, is the cantankerous scalene muscle group. Massage therapists have vanished while working in this mysterious area, never to be seen again. The region and its muscles are complex and peculiar, and many lesser-trained massage therapists have low confidence working with them. (Click/tap heading to read more.)

for pain: in the upper back (especially inner edge of the shoulder blade), neck, side of the face, upper chest, shoulder, arm, hand

muscle(s): scalenes (anterior, middle, posterior)

5 For carpal tunnel syndrome, tennis elbow

Just beyond your elbow, all the muscles on the back of your forearm converge into a single thick tendon, the common extensor tendon. At the point where the muscles converge, in the muscles that extend the wrist and fingers, lies one of the more inevitable trigger points in the body: Perfect Spot No. 5. It is constantly provoked both by computer usage today, and more often by the use of a pen in simpler times — and by the occasional tennis match, then and now, or maybe crocheting. (Click/tap heading to read more.)

for pain: in the elbow, arm, wrist, and hand

muscle(s): extensor muscles of the forearm, mobile wad (brachioradialis, extensor carpi radialis longus and brevis), extensor digitorum, extensor carpi ulnaris

6 For gluteal and hip pain, sciatica, bursitis, low back pain

When you have back pain, buttock pain, hip pain, or leg pain, much or even all of your trouble may well be caused by trigger points in the obscure gluteus medius and minimus muscles, a pair of pizza-slice shaped muscles a little forward of your hip pocket. Other muscles in the region are usually involved as well, such as the gluteus maximus, piriformis, and the lumbar paraspinal muscles. However, the gluteus medius and minimus are a bit special: their contribution to pain in this area is particularly significant, and yet people who have buttock and leg pain rarely suspect that much of it is coming from muscle knots so high and far out on the side of the hip. (Click/tap heading to read more.)

for pain: in the low back, hip, buttocks (especially immediately under the buttocks), side of the thigh, hamstrings

muscle(s): gluteus medius and minimus

7 For jaw pain, bruxism, headache

Your masseter muscle is your primary chewing muscle — not the only one, but the main one — and it covers the sides of the jaw just behind the cheeks. It's also the main muscle that clenches your jaw and grinds your teeth, unfortunately, and it's one of the most common locations for trigger points in the human body. It is probably an accomplice in most cases of bruxism (that's Latin for "grinding your teeth") and temporomandibular joint syndrome (jaw joint pain), plus other unexplained painful problems in the area. (Click/tap heading to read more.)

for pain: in the side of the face, jaw, teeth (rarely)

muscle(s): masseter

8 For runner's knee

A lot of quadriceps aching, stiffness and fatigue emanates from an epicentre of "knotted" muscle in the lower third of the thigh, in the *vastus lateralis*, a huge muscle — one of your biggest — that dominates the lateral part of the leg. Stretching it is effectively impossible, but massage is an option: although often shockingly sensitive, Perfect Spot No. 8 can also be quite *satisfying*. It also often complicates or contributes to other problems in the area, especially runner's knee (iliotibial band syndrome). (Click/tap heading to read more.)

for pain: in the lower half of the thigh, knee

muscle(s): quadriceps (vastus lateralis, vastus intermedius, vastus medialis, rectus femoris)

9 For chest pain & tightness

The “pecs” are popular: of 700+ muscles, the *pectoralis major* is one of just a dozen or so that most people can name and point to. It also harbours one of the most commonly-encountered and significant trigger points in the human body, and can produce pain much like a heart attack in both quality and intensity. (Click / tap heading to read more.)

for pain: anywhere in the chest, upper arm

muscle(s): pectoralis major

10 For plantar fasciitis

The tenth of the Perfect Spots is one of the most popular of the lot, and right under your feet — literally. It lies in the center of the arch muscles of the foot. This is one of the Perfect Spots that everyone knows about. No massage is complete without a foot massage! (Click / tap heading to read more.)

for pain: in the bottom of the foot

muscle(s): arch muscles

11 For upper back pain

This “spot” is too large to really be called a “spot” — it’s more of an area. The thick columns of muscle beside the spine are often littered with muscle knots from top to bottom. Nevertheless, there is one section of the group where massage is particularly appreciated: from the thick muscle at the base of the neck, down through the region between the shoulder blades, tapering off around their lower tips. There is no doubt that this part of a back massage feels even better than the rest — even the low back, despite its own quite perfect spots, cannot compete. (Click / tap heading to read more.)

for pain: anywhere in the upper back, mainly between the shoulder blades

muscle(s): erector spinae muscle group

12 For low back and gluteal pain, sciatica

At the top of the buttocks lies a Perfect Spot for massage: a sneaky but trouble-making brute of a trigger point that commonly forms in the roots of the gluteus maximus muscle. It’s *below* the lowest part of the low back, but it often *feels* like low back pain. This is the kind of spot that the Perfect Spots series is all about: not only does it tend to produce a profound, sweet ache when massaged, but the extent of the pain that spreads out around it is almost always a *surprise*. It feels like a key to much more than expected. (Click / tap heading to read more.)

for pain: in the lower back, buttocks, hip, hamstrings

muscle(s): gluteus maximus

For low back pain, sciatica

13

Some of the Perfect Spots are perfect because they are “surprising” — it’s delightful to find a place to massage that feels highly relevant your pain in an unexpected location. Others are perfect because they are *exactly* where you expect them to be — and what a relief it is to be able to treat them. Perfect Spot No. 13 is perhaps the ultimate, the quintessential example of a trigger point that is usually “right where I thought the problem was”: in the “pit” of the low back, at the bottom of the thick columns of back muscle beside the spine. (Click / tap heading to read more.)

for pain: in the low back, buttocks, hamstrings

muscle(s): erector spinae muscle group at L5

14 For shoulder pain

I avoided adding Spot 14 to this series for many years, because it’s a bit tricky to find. But precision is not required: although there is one specific spot that’s especially good, nearly anywhere under the ridge of bone on the shoulder blade is worthwhile, and often a surprising key to pain and stiffness everywhere else in the shoulder, *especially* all the way around on the other side, facing forward. (Click / tap heading to read more.)

for pain: any part of the shoulder, and upper arm

muscle(s): infraspinatus, teres minor

What’s new in this article?

2017 — Miscellaneous improvements. Finally added a diagram!

2007 — Publication.

Notes

1. Langevin HM, Fox JR, Koptiuch C, *et al.* [Reduced thoracolumbar fascia shear strain in human chronic low back pain](#). BMC Musculoskelet Disord. 2011 Sep;12:203. [PubMed 21929806](#) [PainSci Bibliography 53517](#)
2. The sensitivity of a trigger point will often feel extremely similar or even identical to a problem that has been bothering you, or has bothered you in the past. It will feel accurate (located in what seems like the right spot to you), relevant to the problem (related or connected to it in some way that may or may not be obvious), or simply similar to a symptom you’ve been having. This “recognition” factor is a standard diagnostic criteria for trigger points (see [Gerwin 1997](#)). It’s characteristic of all of the perfect spots, but often particularly strong with Spot #13.
3. For instance, *spondylolisthesis* is a dislocation of vertebral joint, when one vertebra slides forward over the one below it. Many people don’t even know that this is going on, and it may even be entirely painless. But direct, firm pressure on or near the joint could feel weird and / or bad!

Permalinks

<https://www.painscience.com/articles/spot-13-erector-spinae-lower.php>

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