

Thoracic Spine: Solving Difficult Cases by Thinking Outside the Box

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I've had a recent series of tough thoracic cases. Most of them failed previous medical management, physical therapy and chiropractic care. I've found that if the patient does not begin to respond within two or three adjustments to the local area of pain, they probably will not respond to the fourth, fifth or sixth adjustment. Spinal pain is often referred pain. The thoracic spine is no different. Pain is a liar. The painful area may continue to feel restricted and tender, but that does not mean you should continue to aggravate it.

I want to share two things here: First, a conceptual model or protocol of how to approach chronic pain cases; how to figure out what else to do when adjusting the local area is not enough. Second, I want to outline the main patterns, the usual culprits, a list of my "Most Missed" for the thoracic spine. I've included a table to keep it simple; a basic protocol for addressing chronic pain by looking beyond the obvious subluxation.

Searching for a Solution

Let's assume you have addressed the basics, including adjusting the local area; addressing the posterior ribs; and basic rehab to lengthen the pectorals and wake up the middle trapezius area. If this basic approach hasn't worked, what else can you do? First, in the symptomatic region, find the most tender, restricted area and clearly mark it. I use an ordinary ink pen. I don't want to fool myself or the patient by being one cm off when I recheck the "hot spot." I love tenderness; it is such a clear, reproducible indicator. It tells both you and the patient that this area has a problem.

Second, begin your search. I used to be an applied kinesiology doc; although I don't really use classic AK very often, my clinical process still is strongly influenced by this tradition. I do a variation on two-pointing, finding some lesion that is connected to the painful area. As the Sesame Street songs goes, *Which of these things belong together, which of these things are kind of the same?* AK would use muscle testing to find the connection between two lesions. What I use now is a bit different.

In my mind, I am holding the question, "What other area is affecting the symptomatic thoracic region?" I'll go through my search pattern using some variation on Barral's "listening," muscle testing or just doing a quick scanning palpation. I'm looking for other tender and restricted places. This search uses a combination of intuition, knowledge of patterns, and palpation. Check the table [below] for where to search.

Marc's Most Missed: Most Common Area
Affecting Chronic Thoracic Pain, by Region

Painful Area

Common Contributory Dysfunctions

All thoracics

Rib cage and intercostals - posterior, lateral and anterior

Sternochondral joints

	Breathing
	Any visceral organ
	Scar tissue
Upper thoracics	Lower cervical spine
	Sternoclavicular joint
	Shoulder complex
	Pericardium, liver, gallbladder, esophagus or stomach
Lower thoracics	Fascia and muscles connecting rib cage to pelvis:psoas, other hip flexors, latissimus dorsi, quadratus lumborum, erector spinae
	Respiratory diaphragm
	Any lumbar or pelvic dysfunction
	Lower abdominal organs

When I find another "lesion," I usually quickly fix what I find in that area. Here's an example. Suppose the pain is in the left upper thoracic and I find a restriction in the left lower cervical. I assess and adjust that lesion, if it's a joint. (If the lesion is muscular or fascial, I'd do some variation on myofascial release.) After I have adjusted that area, I will go back and re-palpate the original left upper thoracic tender area. If it is now less tender and/or less restricted, it means this second area, the left lower cervical, is important, and is connected. If so, I will further evaluate the left lower cervical, see if there are other fixations there, check out the soft tissue, and see if there is excessive give into extension - usually found just above the anterior lower cervical restriction. (See" [Common Clinical Patterns in the Middle and Lower Cervical Spine,](#)" DC, Oct. 21, 2009.)

If I think the left lower cervical is an important source of the referred pain into the left upper thoracic, I want to completely clear the left lower cervical of joint and fascial restrictions, and then train the patient in self-correction for that area, recommending whatever exercises they need. From here, there are three possible paths:

1. If, after the initial correction, the thoracic lesion is now non-tender and no longer restricted, I may have found the key link.
2. If the original symptomatic area is just somewhat better, but still feels tender and restricted, I need to continue to search, either on the same office visit or the next one. I have found and corrected something significant, but it is not enough. The problem could be additional fascial, joint or other issues in the same region I already identified, or it could be another area entirely.
3. If that correction does not reduce the tenderness and restriction in the left upper thoracic, I move on. In the example above, the left lower cervical may be a problem anyway, but it is not the key for this patient at this moment. I will continue my search pattern. Sometimes I end up looking at five or more possibilities. I know this is time consuming, but it is very valuable time spent, which often will generate profound results in chronic pain cases.

This protocol is quite different from the average chiropractic technique. It requires an open mind, a beginner's mind. You need to be able to hold multiple possibilities open. This probably works better for those who, [on the Myers-Briggs scale,](#) are more perceptive than judgmental. (Perceptives tend to always keep options open.)

Marc's Most Missed (for the Thoracic Spine): The Usual Culprits

Upper thoracics: For the upper thoracic spine, the most common causal or contributory lesions are in the lower cervical spine. The lower cervical can also create shoulder pain and weakness. Don't forget to check for anterior lower cervical translation patterns, which need anterior-to-posterior correction. There are all sorts of fascial and muscular problems that can contribute here as well. Think of the scalenes, think of the SCM, think of the subclavius, think of the middle and deep anterior cervical fascia, think of the levator scapula being too tight and short, and think of the upper trapezius as being inhibited.

Check the brachial plexus. If the nerves here are irritated, they may be helped by nerve gliding or by Barral's manual therapy to the nerve sheath. The other major muscular influences on upper thoracic pain include the rotator cuff muscles, especially the infraspinatus, teres minor and subscapularis. Any shoulder problem can affect the upper thoracics.

The whole thoracic spine: I'll also check the intercostals, both at the level of the pain, and just above and below it. You need to check the posterior rib heads and then work all of the way around the thorax. Check the posterior intercostals, the intercostals at the mid-axillary line and the anterior axillary line, and then all the way to the sternochondral junctions. Just get in the habit of thoroughly evaluating these ribs and intercostals spaces, all the way around the thoracic cage.

Thoracic pain can often be referred from the visceral organs. This can be from frank pathology, which would require a medical referral and work-up. More often, a subtle change in abdominal function can create referred pain. I tend to address this through visceral manipulation. You may prefer a reflex method, acupuncture principles, AK or SOT, or nutritional management. If you hit the right spot, you will probably find a rapid change in tenderness and or restriction.

A significant visceral area to consider is the pericardium. Deep chest restrictions seem to contribute to thoracic and cervical pain patterns. You may find obvious segmental correlations; we've all seen the Meric-type charts. Don't get attached to T3 being from the gallbladder; the body just isn't wired quite so simply. It's a software problem.

Here's a brief case history: 39-year-old female with persistent nighttime thoracic pain, waking her with severe pain. Adjusting the tender segments gave relief on the table, but pain returned at night. I tried intercostal work, but made only marginal difference. Finally, checked her abdomen, found very tender areas in the upper abdomen, took a more extensive history (which included some classic signs of reflux) and focused on the upper abdomen. We did visceral manipulation for gastroesophageal dysfunction; got her off junk carbs; and did a brief diagnostic trial of OTC acid blockers. She finally started sleeping through the night.

Don't forget scar tissue. The obvious might be a gallbladder surgery scar creating right upper thoracic pain, but anything can cause anything. Any abdominal scar can affect the thoracic spine. A recent case was a young woman who had severe chronic thoracic pain. The fascinating part of the history was that she was born with four kidneys and had three surgeries at a young age. Addressing these scar tissue areas was the first breakthrough for her, although the case was more complicated than just correcting the scar tissue.

Breathing is important. Almost any chronic thoracic pain will affect the excursion of the rib cage during breathing. Adjustments and soft tissue will not necessarily restore normal breathing. Notice what part of the thoracic cage they are not breathing into, and train them to breathe into that area. I find that placing the patient's own hand over the restricted breathing area is good feedback to get them to expand that region, initially consciously, but hopefully (eventually) unconsciously.

The lower thoracics: Besides all of the factors above, think about what connects the thoracic spine and rib cage to the pelvis. Any muscular connections can be involved. Think of the diaphragm, the psoas, the lats and QL. Lower back issues tend to make the lower thoracic erector spinae overactive. Viscerally, think of any lower abdominal visceral problem, including the renal fascia, ileocecal valve and female reproductive organs.

Don't forget that the patient has a right to more than one problem. A young man came in with chronic thoracic pain, and his lower back hurt. He had an obvious sacroiliac problem made better by flexion and worse by extension. His habit of slouching into flexion kept him out of lower back pain, but it contributed to his thoracic pain pattern. He couldn't begin to straighten up his posture and lift his thoracic spine until his SI was corrected and he could extend his lower back.

I love tough cases; they keep my mind active and make me think outside the box.

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