

## Clinical Pearls: Treating Dorsalgia, Intercostal Neuralgia and Thumb Tendinitis

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*Editor's note:* The following reviews evaluation and treatment of dorsalgia, intercostal neuralgia and thumb tendinitis of myofascial origin using ischemic compressions and articular mobilizations. It is the fourth article in a series in which the author describes his experiences treating patients with various conditions utilizing these techniques.

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### Dorsalgia

According to the National Board of Chiropractic Examiners' 2005 *Job Analysis of Chiropractic*, dorsalgia is present in 11.5 percent of patients who see the chiropractor. I have found the following technique, which can replace or accompany the vertebral adjustment, to be very effective with patients of any age.

*Evaluation:* With the patient in pronation, apply a firm pressure with the thumbs (one on top of the other) to the lateral aspect of the spinous processes at a 45 degree angle. You should be perpendicular to the patient. When that pressure causes pain, the hyper-irritable vertebrae should be treated.

This examination must be delicate because the spinous processes of the involved area may be quite sensitive. The most important region to be examined is the one pinpointed by the patient.

*Manual treatment* is like the examination, except it lasts 8 seconds without moving your thumbs. Two to three vertebrae may be treated at the same time and the pressure has to be painful, but bearable (to patient tolerance). The more vertebrae involved, the less time you should apply the pressure (2-3 seconds max), because there is a limit to which a patient can support pain at each visit. In my experience, usually there is an evident amelioration within five or six treatments.

**Trigger points** (TrPs) may also be located at the level of the transverse processes, the rhomboid muscle, the upper crest of the scapula, and the supraspinatus muscle, located behind the clavicle and best reached with the patient's hand behind their head.

The infraspinatus muscle is also very tense in most chronic dorsalgias. The best way to treat this muscle is with the patient prone; their arm on the involved side is folded and kept close to their body by the thigh of the practitioner. Thumbtip pressure (both thumbs) is applied from lateral to medial on the lateral aspect of the scapula. If all involved areas are treated, amelioration is often felt after the first few treatments, but all irritations should be eliminated.

*Exercises:* Many patients with chronic dorsal problems overwork or their work is repetitive in nature. It is possible to strengthen the dorsal muscles considerably with simple exercises. I prescribe the following exercises to all patients who want to at least double the strength of their dorsal muscles:

- While standing and holding dumbbells (2 kg apiece for men, 1 kg for women), the patient should cross their arms horizontally and then stretch the arms backward as far as possible. Return to start position and repeat until fatigued.
- Using the same dumbbells, stretch the arms so they make an arc forward from upward (over the head) to downward as far back as possible. Return to start position and repeat until fatigued.
- I suggest these two exercises be performed once a day, 10-15 repetitions maximum per exercise, and repeated daily at the beginning of treatment. The aim should be at least 50 repetitions per exercise, which can take a few months, and dumbbell weight can be increased slightly (doubled) to patient tolerance.

I have found that these exercises strengthen the dorsal region substantially and long term. In fact, some patients have noted strength gains compared to baseline even several years after discontinuing the exercises.

### Intercostal Neuralgia

Intercostal neuralgia is normally caused by a direct blow to the area; a cough that has lasted many days; or any strong pressure on the ribs, such as leaning on the side of an upright washing machine to get a piece of clothing at the bottom. Any strong pressure or pulling of the diaphragm muscle may cause this problem. It is particularly common in patients over 50 years old. I find ischemic compression therapy to be almost always efficacious when these irritations are present, even in chronic cases.

The reason why repeated coughing may cause this neuralgia is because the diaphragm muscle is attached lateral to the breast at the level of the seventh and eighth ribs. Trauma may occur anywhere in the rib cage, the costodorsal or costosternal articulations, or the articulations between the three segments of the sternum.

*Evaluation:* The examination is done using thumbtip pressure on every square centimeter of the area pinpointed by the patient. The practitioner must be very careful when treating this neuralgia. The ischemic compressions must be very delicate at the beginning, easily bearable by the patient, especially in women over 50 years of age. If the 3- or 4-second pressure along the symptomatic rib is too strong, a cartilaginous section or a rib may be displaced. In my experience, five to 10 treatments may be necessary in order to get rid of all the irritation.

*Note:* If it is evident that the rib is broken and displaced, the patient should be referred immediately for appropriate treatment. If the rib is broken, but well-aligned, and your treatment is easily bearable, [ischemic compressions](#) will normally eliminate the trigger points in six to 12 treatments.

### Thumb Tendinitis

Chronic thumb tendinitis is a common problem among our patients and can be treated quite easily with mobilization. With the patient supine, apply pressure with both thumbs to the base of the symptomatic thumb at the carpophalangeal articulation. The index and middle fingers of both hands are used to force extension of the thumb to patient tolerance.

Hold the pressure in that position for 8 seconds and repeat at subsequent visits until the irritation is completely gone. In chronic cases, it can take 6 to 12 treatments.

Thumb tendinitis can also affect the chiropractor who applies repeated thumbtip pressure to trigger points. Having used my thumbs almost exclusively for myofascial therapy with ischemic

compressions, I have been treated using the above technique as well.

While treating my patients, I would feel pain on the exterior side of the thumb. I would ask my secretary to give me the aforementioned mobilization, and instantly the burning pain would go away. I had the treatment repeated five or six times in two weeks and did not have any recurrent of problems for a year or so. After many years, the thumbs get bigger and stronger, and tendinitis rarely returns.

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