COMPENDIUM EDITION

Clinical Application of COUNTERSTRAIN

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Introduction

History of the Development of Counterstrain — by John C. Glover, D.O., F.A.A.O.

Osteopathic Manipulative Techniques of the 1930s consisted primarily of soft tissue and high-velocity/low-amplitude thrust techniques. These were the techniques Larry Jones, D.O., brought with him when he went into general practice in the mid-1930s. These techniques served him well for the treatment of most musculoskeletal problems. Occasionally, a patient with a musculoskeletal problem who did not respond to these treatment techniques would show up in Dr. Jones' office.

In the mid-1960s just such a patient came to see Dr. Jones. The patient complained of low-back pain and difficulty standing upright due to the pain. Over the course of the previous two months this patient had received chiropractic care from two different chiropractors without any resolution of the problem. The two chiropractors lacked the skills to treat the problem and proceeded to treat the patient with high velocity/low amplitude thrust he had used so many times before. Unfortunately for the patient, but fortunately for the osteopathic profession, the patient didn't respond well to Dr. Jones' treatments either! For two months Dr. Jones continued to try to resolve the patient's problem, with only limited success.

At one visit, the patient complained he had been unable to get a full night's sleep for quite some time. The pain either kept him from falling asleep, or would awaken him when he moved if he did manage to find a comfortable position for sleep. During the next 20 minutes, Dr. Jones adjusted the patient's position in small steps and propped him up with pillows until he found a position where the patient was pain free.

Dr. Jones asked the patient to stay in the position they had achieved while he went to treat another patient. When he returned the patient was still pain free. Before letting the patient move, Dr. Jones asked him to concentrate on remembering the position and how to get back into it so he could sleep at night. He instructed the patient to stay relaxed while he slowly took him out of the position. After Dr. Jones had carefully taken the patient out of the comfortable position he helped him stand. To the surprise and delight of both the patient and Dr. Jones, the patient stood up straight for the first time in four months.

Both men were happy with the results, but the event left Dr. Jones with an unanswered question. Why had putting the patient in a position of comfort for 20 minutes eliminated the pain that he had been unable to do with two months of manipulative treatment? Many would have left the question unanswered and moved on to new problems, but Larry Jones was not satisfied to move on without trying to find the answer.

He started by trying to find a position of comfort for patients with similar complaints. Gradually, his success improved and he started [illegible] variety of problems. [illegible] other times he was not, and with either result the process was very time consuming.

As Dr. Jones continued to experiment with finding a position of comfort to treat a patient's musculoskeletal problem, he started to notice discrete areas of myofascial tissue around the vertebra that were tense, edematous, and exquisitely tender. When he found a position of comfort the areas of tenderness disappeared. He started to look for these areas of tenderness and map them out. Also around this time, he became aware of Janet Travell's work with myofascial triggerpoints and thought the areas of discrete tissue were what Dr. Travell had described. He started calling them triggerpoints. Dr. Jones corresponded with Dr. Travell and became aware that the points he was finding differed from those of Dr. Travell in two ways. First, the points were tender locally, where Dr. Travell's points radiated in a specific pattern when pressed. The second difference was that Dr. Jones found his points as a component of a somatic dysfunction, whereas Dr. Travell believed the triggerpoint was the pathology, and not part of a larger problem.

Calling the points associated with somatic dysfunction *Tender Points* helped Dr. Jones

General Counterstrain Guidelines — by Harmon L. Myers, D.O.

How to Locate Target Muscles:

- Use gentle but stable palpation. You need to feel the texture of the muscle. Ask your patient to let you know if discomfort increases or decreases as you palpate a Tender Point.
- Check first the muscles that *refer* pain to the area of discomfort. Relieve the Tender Points in these muscles *before* you examine and treat the muscles located in the area of the pain. The referral muscle often is more proximal than the location of the symptoms. For example, buttocks pain requires that you remove any contribution from the *longissimus thoracis* and *quadratus lumborum* before you try to treat the *gluteal* or *piriformis* muscles. If you fail to treat the offending referral muscles first, you are just spinning your wheels.
- Tender Points in the back, trunk, and extremities are often found on the side opposite the patient's description of the location of the pain.
- Consider which muscle is either being passively stretched or actively tensed when the pain worsens and check for Tender Points in those muscles first. For example, when a patient with low back pain comes into your clinic h... straightening up... muscles first. On... after treating the abdominal muscles such as *rectus abdominus, iliacus,* and *external abdomi nal oblique,* will you move on to the posterior muscles.

How to Provide Successful Counterstrain Treatment:

- Keep your finger on the Tender Point during treatment, if possible. Once you are in position, you can gently rest your finger in place, so you are not exerting a constant pressure. Press down periodically to make sure the Tender Point is relaxed and pain-free. When you have finished treating that muscle, the fact that your finger is still in position over the Tender Point will help reassure you the treatment of that Tender Point has been successful.
- Move your patient into and out of treatment positions *slowly*. As you bring the patient into a position, make sure the muscles do not tense up and make relaxation difficult. After treatment, avoid any rapid movements which could re-establish the pathology you just removed.
- Hold each Treatment Position for at least 90 seconds.
- The Treatment Positions described in this book allow the involved muscle to be passively shortened. As anatomy differs, there may be some variations. Use both the feel of the muscle softening under your finger as you palpate the Tender Point, and the patient's subjective report of absence of discomfort as you probe the Tender Point.
- To be successful, the intensity of discomfort at the Tender Point should be at least 70% improved. If you can attain this degree of relief, the patient often will continue to heal the remaining discomfort after leaving clinic.
- If the Tender Point fails to immediately improve, and the patient is in what should be an optimal position, continue to hold that position. The Tender Point will gradually ease away as you hold the patient in position.

In General:

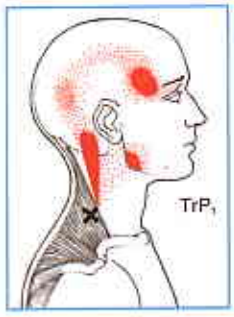
- Anterior Tender Points are usually treated with flexion.
- Posterior Tender Points are usually treated with extension.
- Tender Points located at or near the midline usually require less sidebending, abduction, or rotation.
- Tender Points located more laterally usually require ...
- With multiple Tender Points, treat the most severe first.
- If there is a row of Tender Points, treat the one in the middle first. Often, adjacent Tender Points also will be relieved with this method.
- Explain to your patient they may be sore during the 24 to 48 hours following treatment.

Summary:

1) Locate the relevant Tender Point(s) and address the referral muscle(s) first.
2) Place your patient in a position of comfort using subjective and objective information from the Tender Point. Palpate Tender Point to relieve discomfort and tenseness.
3) Keep your finger on the Tender Point to ensure you have the optimal treatment position. Avoid continuous or heavy pressure during palpation.
4) Maintain the Treatment Position for at least 90 seconds.
5) Return patient to a neutral position *slowly*.
6) Recheck the Tender Point. It should be 70% improved. ▲

Detail on Myofascial Pain Patterns In Case History: #01

TRAPEZIUS



Myofascial Tender Point and pain pattern. Medial Point 1

Location of Tender Point:
Medial Point/Lateral Point
1) Medial in the fibers of the muscle at the junction of the neck and shoulder.

2) Lateral in the fibers of the muscle overlying the supraspinatus muscle.

Anatomical Correlation: Trapezius muscle in the areas mentioned.

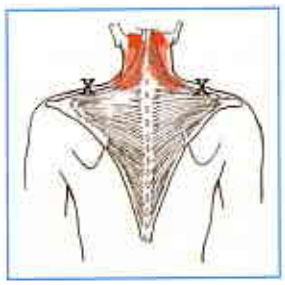
Direction to Press on Tender Point:
1) Squeeze the muscle between the thumb and finger.

2) This can also be elicited by pressing in a caudad direction mid-way between the point of the shoulder and the base of the neck. *Be aware that you might be palpating a Tender Point in the supraspinatus muscle that is under the trapezius.*

Treatment position 1

Treatment Position:
1) With patient supine, place your finger over the Tender Point and sidebend cervical spine toward, with slight rotation away, until you feel maximum relaxation.

2) Sidebend the neck slightly toward the side of the Tender Point. Flexion of the shoulder is 150° to 170°. Apply traction on the arm by pulling in a cephalad direction.



Myofascial Tender Point and pain pattern. Lateral Point 2

Frequency of Occurrence: Very common.

Clinical Correlation(s):
1) Pain in the posterior neck, suboccipital area behind the eye and temporal area.

2) Pain in the posterior neck, shoulder, and suboccipital area.

Associated Pain Referral Pattern: Same.

Alternate Names/Nomenclatures: None.

Explanatory Notes: This muscle was included here because it is one of the most common causes for neck pain and tension headache. *There can be Tender Points anywhere in the muscle which can be relieved by proper shortening of the involved fibers.*

Treatment position 2

ANTERIOR CERVICAL TENDER POINTS

SCALENES
ANTERIOR LATERAL COLUMNS

Location of Tender Point: In the body of the involved scalene muscle.

Anatomical Correlation: Primarily anterior and medial scalene muscles.

Direction to Press on Tender Point: Press anterior to posterior on the anterior and medial scalenes, direct[illegible] medially to some extent.

Treatment Po[illegible] [illegible] moderate. Side[illegible]end toward, rotate toward, to fine-tune.

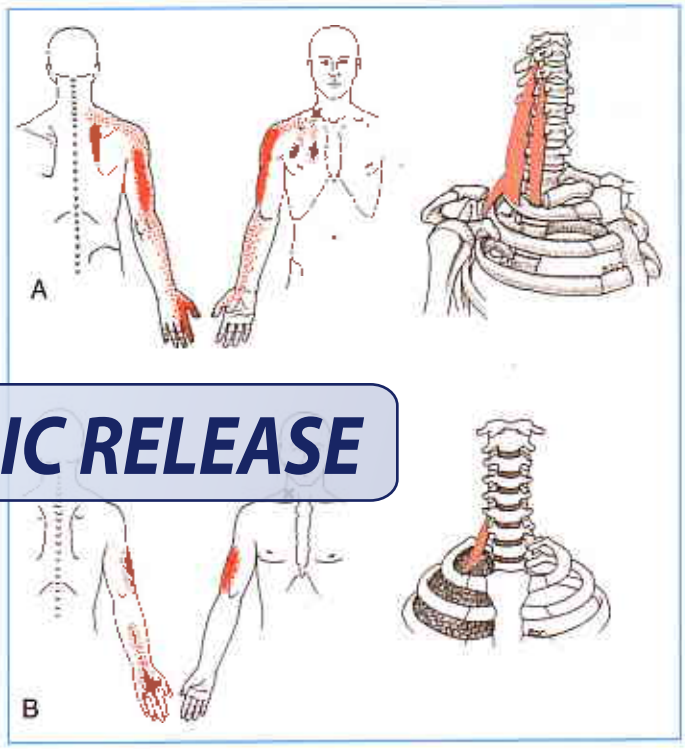
Frequency of Occurrence: Uncommon.

Clinical Correlation(s): Pain patterns in the upper back, the upper chest, and arm and hand on the same side.

Associated Pain Referral Pattern: As stated above.

Alternate Names/Nomenclatures: None.

Explanatory Notes: None.



Scalene pain patterns

Treatment position

TEMPOROMANDIBULAR DISORDERS

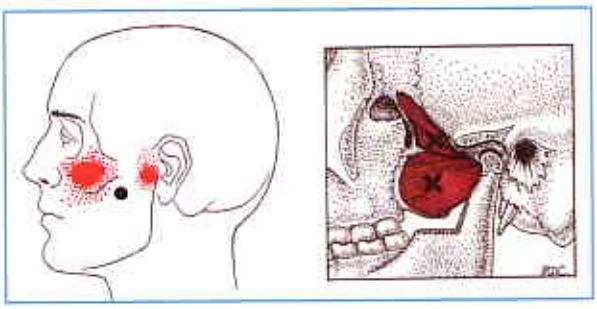
LP LATERAL PTERYGOID

Location of Tender Point:
1) 1cm anterior to the neck of the condyle. Push medial and posterior.
2) Lower edge of the greater wing of sphenoid.

Anatomical Correlation: Lateral ptyergoid muscle.

Direction to Press on Tender Point:
Tender Point 1, press medial and slightly posterior.
Tender Point 2, press medially.

Treatment Position(s): With patient supine, push their open jaw 2cm laterally away from the Tender Point side deviating mandible to the opposite side. Apply stabilizing force with forearm of the motion hand.

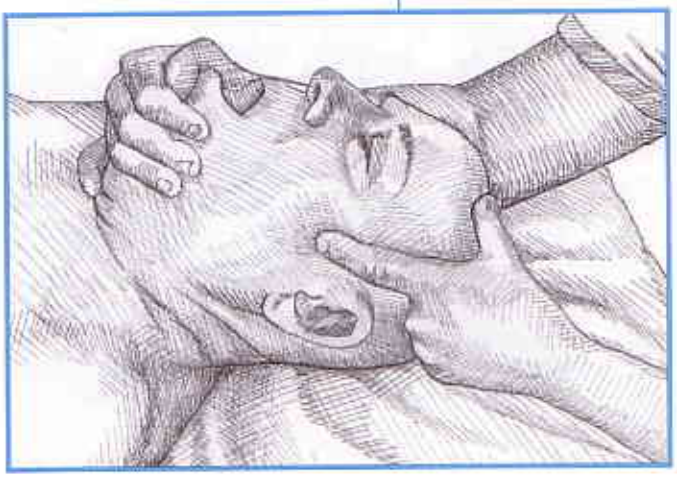


Lateral pterygoid

Frequency of Occurrence: Very common.

Clinical Correlation(s):
1) Pain with chewing
2) Click in TMJ
3) Dyskinesia with mouth opening

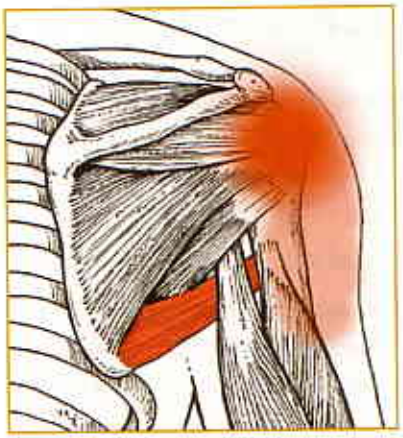
Alternate Names/Nomenclatures: TMJ and maxilla.



Treatment position

POSTERIOR

TERES MAJOR



Teres minor muscle, Tender Point, and pain pattern

Location of Tender Point:
1) On the posterior lateral surface of the inferior angle of the scapula.

2) In the belly of the muscle posterior to the axilla and lateral to the subscapularis Point. This can be found by compressing the muscle between the index finger and the thumb.

Anatomical Correlation: As stated.

Direction to Press on Tender Point:
Press from posterior lateral to anterior medial and pinch muscle.

Treatment Position(s): With patient seated, place their arm in a hammerlock position. Shoulder is extended 30° with the elbow flexed to 90°. Apply marked internal rotation of the humerus.

Frequency of Occurrence: Uncommon.

Clinical Correlation(s): Pain over the posterior lateral shoulder and upper arm.

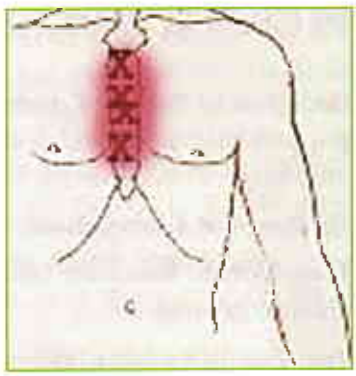
Associated Pain Referral Pattern: Pain and/or paresthesias over lateral brachium and posterior forearm.

Alternate Names/Nomenclatures: None.

Explanatory Notes: None.

Treatment position

ANTERIOR 3-4-5-6 THORACICS



Sternal Tender Points with pain pattern

Location of Tender Point: Midline on the sternum at the level of the corresponding costal cartilage for A 3 T to A 6 T.

Anatomical Correlation: Fascia over the sternum and/or the tissues of origin of the pectoralis major. Apply to A 3-4-5-6 T Points.

Direction to Press on Tender Point: Press anterior to posterior.

Treatment Position(s):

1) With patient supine, stand at the head of the table with your flexed knee on the table beneath the patient's mid-thoracic area. Use your hand and wrist to apply additional force against the upper thoracic spine to achieve a mobile point by exerting the desired amount of flexion.

Treatment position 1

2) With patient [illegible] end of the table [illegible] against your anterior body — your upper thigh, hip, and pelvis, if you are tall — your abdomen or even chest if you are short. The patient's arms hang toward the floor. By exerting more or less pressure against the upper thoracic spine the desired level of flexion is achieved.

Treatment position 2

Frequency of Occurrence: Common.

Clinical Correlation(s): Substernal and mid-thoracic pain, especially with extension, usually responds well to Counterstrain manipulation. Often present with epigastic pain and dyspepsia.

Alternate Names/Nomenclatures: None.

Explanatory Notes: The sternal Tender Points are frequently seen in patients who have had cardiac bypass surgery. The pain often will persist for several months.

POSTERIOR LUMBAR SPINE

QUADRATUS LUMBORUM

Location of Tender Point:
1) On the 12th rib as it passes above the transverse process of L1 in the angle formed by their apposition.
2) On the tips of the transverse processes of the lumbar vertebra palpating from a lateral to medial direction.
3) On the superior aspect of the crest of the ilium where the quadratus attaches.

Anatomical Correlation: As stated.

Direction to Press on Tender Point:
1) Inferior to superior on the lateral aspect of the 12th rib.
2) Lateral to medial toward the vertebral transverse process.
3) Superior to inferior on the crest of the ilium.

Treatment Position(s): With patient prone, stand on the side of the Tender Point. Sidebend the trunk toward the Tender Point first. With the knee flexed, extend the leg to the level of the Tender Point by lifting the thigh. Apply pressure on the knee through the femur and hip to accomplish distraction. Sidebend further and create some pelvic rotation as well. Rotate the thigh externally to fine-tune.

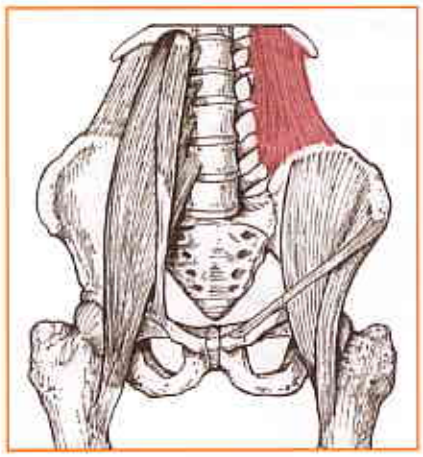
Frequency of Occurrence: Common to very common.

Clinical Correlation(s): Posterior buttock pain most often. May be a causative factor in IBS symptoms.

Associated Pain Referral Pattern: Sacroiliac and buttock area pain as well as lateral and anterior pelvic pain.

Alternate Names/Nomenclatures: None.

Explanatory Notes: None.



Quadratus lumborum

Quadratus lumborum pain pattern

Treatment position

POSTERIOR KNEE PAIN

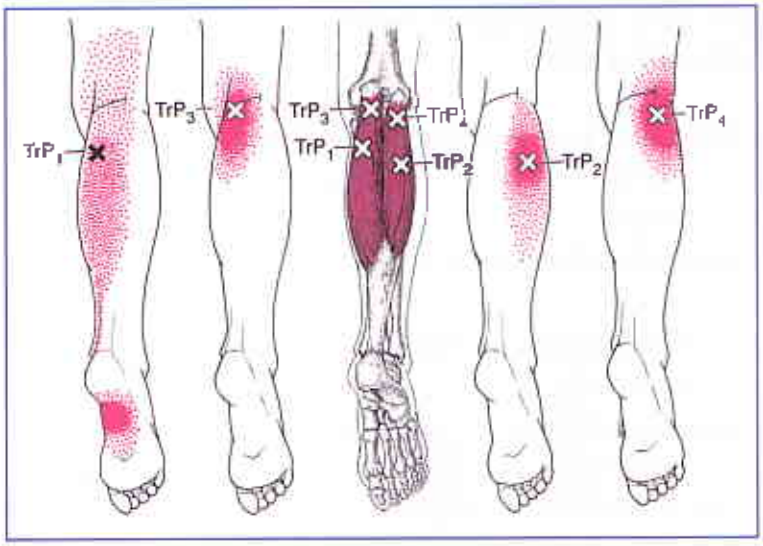
GASTROCNEMIUS MUSCLE

Location of Tender Point: The most common Tender Points are on the medial and lateral heads of the gastrocnemius muscle near the lower border of the popliteal space. Tender Points also can be found anywhere in the belly of the muscle and along the sides of the Achilles tendon near its insertion.

Anatomical Correlation: As stated.

Direction to Press on Tender Point: Press from posterior to anterior.

Treatment Position(s): With patient prone, stand at the same side of the table as the Tender Point. Flex the patient's table and your knee is flexed with the dorsal arch of the foot resting on your thigh. Push the palmar surface of the heel toward the calf to achieve marked extension of the ankle. Rotate internally or externally to fine-tune. Move the heel toward the side of the Tender Point.



Myofascial pain pattern


Treatment position

Frequency of Occurrence: Common.

Clinical Correlation(s): The most common presentation of posterior knee pain is when walking, when the ankle is flexed and the knee is extended.

Associated Pain Referral Pattern: Calf pain may be present and, more rarely, posterior ankle pain.

Alternate Names/Nomenclatures: Jones called this point "Extension Ankle."

Explanatory Notes: None.

CLINICAL APPLICATION OF COUNTERSTRAIN

COMPENDIUM EDITION

What the world needs now is a comprehensive overview of manual medicine that focuses on its efficacy, and proven efficiency in providing fast, long-lasting and cost-effective patient outcomes. And here it is!

Building on the educational and clinical impact of the same title of the late
Clinical Application
L. Myers, (2006 Os
offer this **COMPEN**
contributions from scholars and practitioners who work, practice, or teach around the world: William H. Devine, D.O. C-NMM OMM, C-FM OMT, *Medical Editor*; Christian Fossum, D.O. (UK), *From Theory to Practice*; Richard L. Van Buskirk, D.O., PhD, F.A.A.O., *Physiology of Somatic Dysfunction*; Michael Kuchera, D.O., F.A.A.O., *Differential Diagnosis of Myofascial Points*; Randall Kusunose, PT, O.C.S. *Cranial Counterstrain*.

The **COMPENDIUM EDITION** of Dr. Myers' *Clinical Application of Counterstrain* brings a multi-disciplined view of the philosophy and techniques to highlight why manual medicine continues to be a low-cost and effective approach to maintaining good health and fixing what ails us.

Harmon L. Myers, D.O.

"Counterstrain is a patient-friendly technique... [and] Dr. Myers is an expert in its application. I have watched him produce rapid, dramatic cures of long-standing complaints in our Clinic."
***— Andrew Weil, M.D.** Founder and Director of the Program in Integrative Medicine, University of Arizona, Tucson*

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