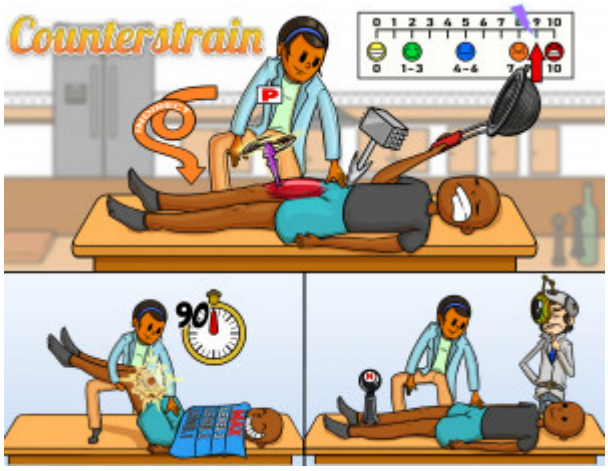
Counterstrain Overview

Counterstrain is an indirect and passive technique invented by Lawrence Jones, DO to treat somatic dysfunctions associated with a tender point. It is an indirect, passive technique. The pain from tender points is thought to be due to inappropriate proprioceptive firing. Counterstrain follows a regular procedure consisting of first identifying the tender point. The patient is then asked to rate their pain on a pain scale. They are then passively placed into a position of ease for 90 seconds. At this point, a therapeutic pulse, or fasciculation, may be observed. Patients are then slowly returned to normal position and reassessed for pain.



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Characteristics

Indirect
Indirect-route
Counterstrain is an indirect technique, meaning the physician positions the patient's dysfunction towards a point of ease, away from the restrictive barrier.

Passive
Physician-forced
Counterstrain is a passive technique, meaning the forces used during treatment come from the physician. The patient is instructed to remain relaxed and to refrain from muscle contraction during treatment.

Pathophysiology

Inappropriate Proprioception
Inappropriate Propeller-scepter
The predominant theory on the pathophysiology of counterstrain points involves inappropriate proprioceptive firing. Overload of a muscle (the agonist) causes reflexive and defensive contraction. When stretched, the agonist muscle's spindle fibers sense the strain, and the alpha neurons defensively contract the agonist. The opposing muscle (the antagonist) will be stretched and may then reflexively contract, resulting in a "counter strain". The counterstrain technique is meant to reset muscle proprioception.

Treatment Steps

Tender Point
Tenderizer Point
The physician finds a discrete point of tissue texture change in myofascial tissue that is locally tender. Tender points are hypersensitive but do not radiate pain to other areas of the body. Tender points are usually found in muscle, most often the muscle belly or tendinous attachment, but may also be found in other fascial tissues. Tender points are found in consistent locations from person to person.

Pain Scale
Pain-bolt Scale
When palpating a tender point, the physician should establish a pain scale with the patient, such as 0 (not tender) to 10 (severely tender). The physician then tells the patient to consider the pain from the tender point a 10, in order to accurately measure pain reduction. Some prefer to use a percentage scale. For example, pre-treatment pain may be rated as 100%, and complete elimination of tenderness would be 0%.

Maximum Comfort
Maximum Comforter
After establishing a pain scale, the physician places the patient in a position of maximum comfort. This means that palpation of the tender point causes pain rated as 3 or less on the pain scale, or at least a 70% improvement.

90 Seconds

90 Second-timer

The physician holds the patient in the position of maximum comfort for 90 seconds while the patient remains relaxed. This amount of time is sufficient to treat most tender points. A notable exception is the treatment of rib tender points, which should be held for 120 seconds.

Therapeutic Pulse

Feeling Pulsing Sensation

During the 90-second hold, the physician may palpate a pulsing sensation in the tender point being treated. This is not necessary for treatment success but usually indicates an adequate response to treatment. This should not be confused with the “local twitch response” observed in myofascial trigger points.

Slowly Return to Neutral

Slowly Returning to Neutral

After 90 seconds, the physician slowly returns the patient to neutral, or pre-treatment position. It is important for the patient to remain relaxed during this step.

Reassess

Assess-man

After returning the patient to neutral, the physician reassesses the tender point and any associated somatic dysfunction.
