

Glossary

abductors: muscles that move the part of the body away from the midline of the body

acetylcholine (ACh): The main neurotransmitter that is released in excessive amounts at affected motor endplates during the formation of myofascial trigger points as part of the Simons' Integrated Hypothesis.

acetylcholinesterase: biochemical that metabolizes acetylcholine

active scar: any scar that is causing a symptom

active trigger point: a TrP that causes pain when the muscle is in action or at rest.

adductor: muscles that move the part of the body towards midline—adding to the midline.

adenosine triphosphate: the main cellular energy supplier

adhesion: fibrous bands of normally separate tissues

adhesive capsulitis: limitation of range of motion due to inflammatory thickening and adhesion of the tissues in the joint capsule.

allodynia: pain from a normally non-painful stimuli

anaerobic: without oxygen; with insufficient oxygen

anterior: pertaining to the front

aponeurosis: flat form of tendon

atalgic gait: unbalanced walk due to pain, with most of the time during the stride spent with the weight on the less painful side.

attachment trigger point: a trigger point occurring in a tendon or ligament or other attachment tissue, often initiated by the inflammatory reaction to sustained increased tension caused by TrPs in the more central parts of the muscle.

axillary: pertaining to the underarm or the arm pit

autonomic phenomena: autonomic nervous system phenomena that may occur in the same general referral pattern as the pain pattern of a trigger point. These include symptoms such as blanching, redness, coldness, heat, redness, goosebumps, sweating and hypersecretion.

belly, muscle: the widest part of the muscle, also called a gaster

bruxism: clenching or grinding of the teeth

calcification: process of tissue hardening by mineral salts deposition

cartilage: firm, nonvascular type of connective tissue

central nervous system: (CNS) brain and spinal cord

cervicogenic: generated in the neck

chronic: long-standing or recurring, but not necessarily irreversible

composite pain pattern: referral pattern from multiple, often overlapping TrPs.

contract-release: gentle voluntary muscle contraction immediately followed by relaxation coupled with muscle lengthening

contraction: deliberate shortening of a muscle by electrical motor unit potentials, as opposed to contracture

contraction nodule (or knot): nodules composed of clusters of TrPs

contracture: sustained physiological muscle shortening in the absence of electrical motor unit potentials

dermographia: a condition in which you can write on your skin with your finger.

dorsiflexion: turning the foot or toes upward

dry needling: use of solid needles for pain therapy, rather than injecting anesthetic.

dysethesia: an abnormal sensation, often unpleasant, and sometimes in the absence of stimulation

dynamic: moving, as opposed to static

dyspareunia: painful menstruation

dyspnea: shortness of breath

end plate: the end of a motor nerve fiber

excitotoxin: biochemical that bind to specific receptors and can cause cellular toxicity

extraocular: outside the eye

extrinsic muscles: muscles that originate outside the base structure and attach on to that structure

facet: posterior vertebral joints, also called zygapophyseal joints

facilitation: a process or activity that makes events more easily repeatable

failed surgical back: the symptoms remain or increase in spite of back surgery

fascia: the 3-dimensional integrative matrix that encloses and connects body structures from the cellular to organ and muscle level.

flexion: bending of hinge joints

foot drop and foot slap: gait dysfunctions that describe the failure of the foot to clear the floor during the stride.

gait: manner of walk

gait cycle: the cycle of stride between the heel strike of one foot to the next heel-strike of the same foot

gastor: another word for belly, such as the belly of a muscle

girdle (pelvic girdle, shoulder girdle): In anatomy, a “girdle” refers to any structure that acts like a belt. For example, the shoulder girdle refers to the bony ring and surrounding connective tissues that attach and support the shoulder.

goniometer: an instrument that measures angles, used in range of motion testing and documentation.

HPA axis- the balance among the hypothalamus, pituitary and adrenal hormones.

hyperalgesia: amplified pain reaction to a normally painful stimuli

hyperesthesia: increased sensitivity to stimulation

hyperlax—another term for hypermobile

hypothyroid: inadequate amount of bioavailable thyroid hormone

idiopathic: of unknown cause

insulin resistance: condition in which insulin is less and less able to metabolize glucose—the body becomes resistant to the normal effect of the insulin.

intrinsic muscles: muscles with both ends attached to the base structure

involved muscle: muscle with one or more TrPs

kinesiophobia: the fear of certain movements

kinetic: movement or motion

kinetic chain (or line): an anatomical chain of muscles and other tissue, linked through the fascia, that works together to produce movement

latent myofascial trigger point: a TrP that causes pain when the muscle is in action

lateral: to the side

local twitch response: this is a prolonged contraction of the taut band muscle fibers associated with a myofascial TrP.

lumbar: low back

matrix: network

mediolateral: center to side

meralgia paresthetica: unusual sensations in the outer thigh, such as itch, tingling, a feeling of trickling water on the skin, or of ants crawling under the skin.

microcirculation: circulation in the smallest blood vessels, such as the capillaries.

microadhesions: minute areas of stuck tissue.

myalgia: muscle pain

myofascia: fascia of the muscle

myofascia trigger point: a hyper irritable spot in skeletal muscle associated with a hypersensitive contraction nodule in a taut band.

myogenic: muscle-generated

neurotransmitter: informational biochemical released from one cell to transfer a message across the gap to another cell.

palpation: the act of touching with intent to diagnose or discover. Taking a pulse is a type of

palpation.

paradoxical respiration: this is a form of breathing wherein the chest expands and the belly contracts when you breathe in. During healthy “belly breathing,” the belly expands as the breath is drawn in, and contracts during exhalation.

paresthesias: abnormal sensations, including: prickling, burning, tingling or numbness

perineum: area between genitals and anus

periosteum: fibrous membrane covering the bone except for the joint cartilage.

pH: simplified, it is a shorthand for the acid base balance, with 7 being neutral and the lower the number, the more acidic the solution.

physiatrists: in the USA, they are specialists in rehabilitation and physical medicine.

piezoelectric: the ability to generate and conduct electrical fields

plantar fasciitis: inflammation of the plantar fascia

posterior: to the back

postprandial: after a meal

proprioception: the ability to recognize where one part of the body is in relation to other parts, and to the world around them.

range of motion (ROM): the distance and a joint can move from flexed to extended position. Active ROM is caused by the patient’s muscle contraction. Passive ROM is generated by another person moving the muscles.

reactive cramp: a muscle cramp caused by its reaction to the release of another muscle.

receptor: any type (sensory, motor, etc.) of nerve endings

referral pattern: specific pattern of pain and/or other symptoms caused by a specific trigger point

rotoscoliosis: scoliosis that includes a component of rotational curvature around the spinal

sarcomere: the basic contractile unit of striated muscle

satellite trigger point: a TrP formed due to the mechanical or neurogenic activity of another TrP.

sciatica: low back and hip pain that radiates down the back of the thigh into the calf. This is a

description; not a diagnosis.

scoliosis: lateral spinal curvature

spasm: increased muscle tension due to non-voluntary motor activity. Not always accompanied by shortening of the muscle.

spillover pain: this is an increased area of referred pain and other symptoms that occurs in some patients due to greater hyper irritability of the TrP. This is more common and often more extensive in patients with multiple TrPs and central sensitization.

static stretching: stretching the muscle while at rest, lengthening and holding the stretch.

taut band: rope or string-like structure in TrP-involved striated muscle

temporal summation of second pain (also called wind-up): this is a feature found in central sensitization states. In these states, additional pain stimuli cause the pain level to increase to a level higher than it would usually, and after the pain stimuli is over, the pain level takes longer to decrease, and often does not return to the original level. Additional pain stimuli can further increase the pain level, further sensitizing the central nervous system.

tinnitus: ringing, crackling or other unusual internally generated noises in the ear

trigger point cascade: a chain reaction that can occur when one TrP activates and other muscles in the referral pattern or those that compensate activate satellites. At times this can be like a complex waterfall, with multiple TrP cascades occurring simultaneously.

unilateral: on one side

vaginal cuff: the inner “cuff” edge of the vagina created by removal of the uterus

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