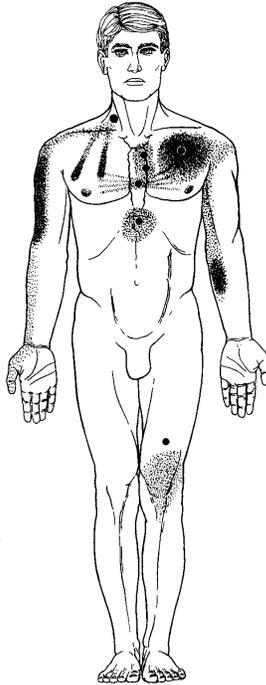
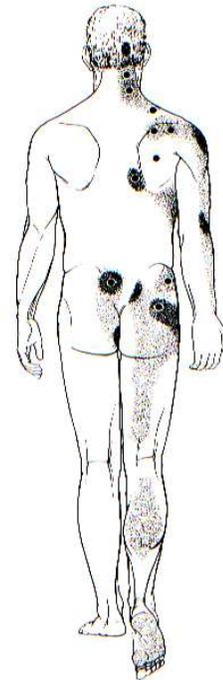


## Herniated Trigger Points



The term, Herniated Trigger Points, (TrPs) was coined by Turek and these trigger points can occur in any of the 500 muscles of the body, and vary in size from that of a sesame seed to the size of a golf ball. The TrP feels like a spongy marble and the patient will push the fingers directly into the tender point. Myofascial trigger points are areas of the muscle that are painful at rest, prevent full lengthening of the muscle, weaken the muscle, and may refer pain in the muscle group on pressure.



Travell and Simons explain the neuromuscular mechanism responsible for the generation of TrPs as “An acute muscle strain may overload the contractile elements in one region of the muscle causing tissue damage that includes tearing of the sarcoplasmic reticulum and release of its stored calcium, with loss of the ability of that portion of the muscle to remove calcium ions. The chronic stress of the resultant sustained contractions may cause a vulnerable region of the muscle to become disproportionately strained, repeating this same process.” Repeated use of this part of the muscle will cause disruption of the fascial covering, and this may allow the underlying muscle to protrude through the fascial covering and become entrapped.

Fascial tears can also occur from an indirect injury by prolonged exercise in an untrained person, or a violent contraction of the muscle. Muscle fibers rupture and the muscle herniates through the overlying fascia. A soft elastic tumor that is not adherent to the skin presents itself. It becomes tense and painful on contraction of the muscle. The pain from a TrP can vary from mild to severe and be incapacitating.

The pain of a TrP is usually described as steady, deep, and aching. The muscle pain caused by a TrP may be associated with localized ischemia, histochemical changes at the peripheral nociceptive nerve endings, and central nervous system changes including increased activity within the sympathetic nervous system.

There is a strong correlation among herniated trigger points, classic acupuncture points, and motor points of the muscles.



The goal of treatment is to force the entrapped tissue below the superficial fascial layer with thumb pressure and to reduce the abnormal contraction of the involved muscle fibers. Ischemic pressure from the thumb is applied to the TrP long enough to inactivate it and to feel the TrP melt under the thumb.

In treating the TrP the muscle must be relaxed and stretched slightly, and the thumb is then pressed into the TrP with enough force to create a tolerably painful reaction. The muscle must be relaxed, as tension will protect the TrP from the pressure. The discomfort will abate and more pressure is then applied. This process is repeated up to 1 minute.



The Activator instrument can also be used over the TrP to inactivate it. Numerous thrusts are made with the instrument into the TrP.



To save wear and tear on the thumb, an instrument can be used to exert pressure into the TrP. This is particularly useful over large muscles such as the gluteus maximus or to reach the piriformis muscle.



Electric point stimulation can be used over the TrP. These instruments also have the capability of locating the TrP to be treated.

#### ICD9 Diagnosis Code for Myofascial Trigger Points

729.1 Myofascial Pain Syndrome

#### CPT Treatment Codes for Myofascial Trigger points

97140 Manual Therapy

97124 Ischemic compression (if 97140 not used)

97032 Attended electrical stimulation

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