

Trigger Point Dry Needling

What is TDN?

How does it Work?

Will it be Helpful for You?



Trigger Point Dry Needling is the use of a thin filiform needle to stimulate underlying myofascial trigger points for the management of neuromusculoskeletal pain and movement impairments. A trigger point is a localized area of hyper-irritable muscle fibers forming a taut band that play a role in producing and sustaining feelings of pain and discomfort. Trigger points develop in muscles for various reasons including tissue injury, overuse, postural faults, poor movement patterns, etc.

TDN works by mechanically stimulating the area of muscle where the needle is inserted producing a local twitch response or rapid depolarization of muscle fibers, dramatically reducing muscle activity and resulting in decreased pain and dysfunction. This decrease in pain is related to the removal of muscular compression on joint, nerve and vascular tissue. Occasionally, insertion of a needle can reproduce “referred pain” symptoms. This is often a positive sign confirming the trigger point as being the cause of the pain. It is theorized that TDN also stimulates release of endogenous opioids and initiates a “new healing process”.

TDN is helpful in treating several conditions where myofascial and/or neuromuscular restrictions are present. Trigger points may lead to impairments in body structure, pain, and functional limitations, as well as restrictions in range of motion due to contracted muscle fibers or taut bands, as well as other soft tissue limitations. TDN can penetrate deeper into areas of myofascial pain and restriction than can treatment with mechanical compression forces such as massage, foam rolling, etc.

TDN vs. Acupuncture

While TDN uses the same filiform needle as acupuncture, there is a very different theoretical purpose. TDN is based on traditional and tested practices of Western Medicine to restore muscle function. Needle insertion is based on identification of palpable musculoskeletal trigger points. Acupuncturists follow Traditional Chinese Medicine philosophy where needle placement is based on meridians, with the goal of normalizing energy imbalances in the body to cure syndromes. With TDN, clients should notice prompt subjective and objective signs and symptoms of change.

All physiological effects of TDN converge to produce increased ROM, decreased pain, and restored function.



Is TDN Painful?

Treating the neuromuscular tissue that is not allowing proper movement is the goal of TDN. The initial insertion of the needle does not usually cause any discomfort. The local twitch response can cause a brief painful reaction. Some describe this as an electric shock or a muscle cramping sensation. It is important to remember that the therapeutic effect only occurs by eliciting the twitch response; therefore, it is the desirable reaction. Most would describe treatment as feeling uncomfortable, but not painful.

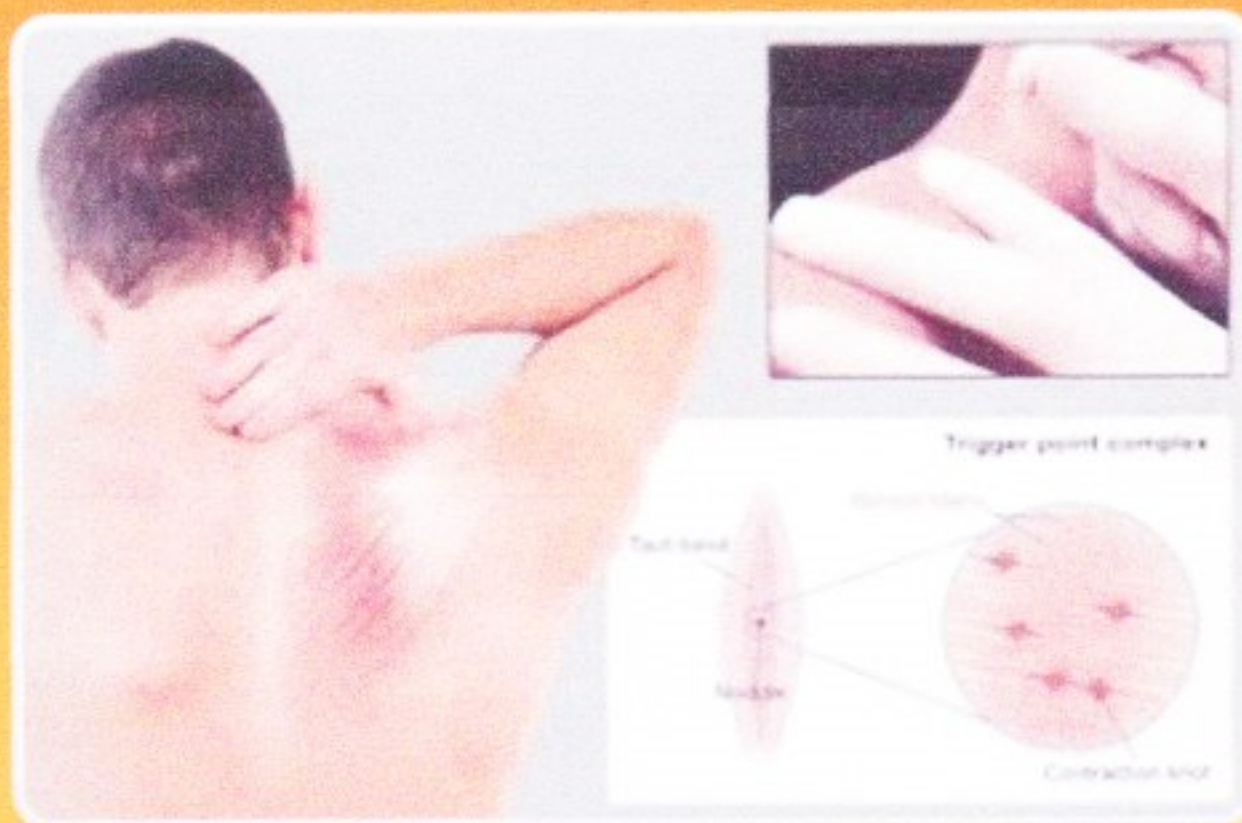
Pain referral patterns exist for muscles, among all other innervated tissues, and can help partially explain the pain a person may be experiencing. Pain from a trigger point can be spread to another remote location along its myotomal referral pattern and typically indicates a true trigger point. For example, one may experience pain down the back of the thigh or even the calf when needling the piriformis muscle located in the posterior hip.

Common side effects (1-10% of people) of TDN include muscle soreness, fatigue, and bruising. It is recommended to gently use, stretch, and heat a muscle that may be sore from treatment.

TRIGGER POINTS II



Common Trigger Point Referral Patterns



Physiological Effects

- **Increased Blood Flow**
- **Decreased Banding**
- **Decreased Spontaneous Electrical Activity**
 - A characteristic of neuromuscular dysfunction that is correlated with lower pain pressure thresholds)
- **Biochemical Changes**
 - Those involved in pain thresholds, inflammation, and immune regulation
- **CNS Changes**
 - Acting not only locally but remotely