Dry Needling/ Intramuscular Stimulation (IMS)

Dry needling is the use of solid filiform needles for therapy of muscle pain, sometimes also known as intramuscular stimulation. Acupuncture and dry needling techniques are similar.

Dry needling for the treatment of myofascial (muscular) trigger points is based on theories similar to traditional acupuncture; however, dry needling targets the trigger points, which is the direct and palpable source of patient pain, rather than the traditional “meridians”, accessed via acupuncture.

What distinguishes dry needling from traditional acupuncture is that it does not use the full range of traditional theories of Chinese Medicine. Dry needling would be most directly comparable to the use of so-called 'a-shi' points in acupuncture.

In the treatment of trigger points for persons with myofascial pain syndrome, dry needling is an invasive procedure in which a filiform needle is inserted into the skin and muscle directly at a myofascial trigger point. A myofascial trigger point consists of multiple contraction knots, which are related to the production and maintenance of the pain cycle.

Proper dry needling of a myofascial trigger point will elicit a local twitch response (LTR), which is an involuntary spinal cord reflex in which the muscle fibers in the taut band of muscle contract. The LTR indicates the proper placement of the needle in a trigger

point. Dry needling that elicits LTRs improves treatment outcomes and may work by activating endogenous opioids.

Inserting the needle can itself cause considerable pain, although when done by well-trained practitioners that is not a common occurrence.

Chan Gunn introduced a type of dry needling called intramuscular stimulation in the 1980s that moved away from using trigger points. Gunn believed that the peripheral muscle spasm was not the origin of pain, but instead a tight multifidi was causing spinal nerve compression, radiculopathy, and nerve damage running peripherally. This spinal nerve damage eventually reached the associated muscle, causing spasm and transformation to a trigger point. Therefore, Gunn recommended a needle be placed in the paraspinal muscles in addition to the distally affected muscle.