

ORTHOPEDIC & SPORTS ACUPUNCTURE:

A more modern and western approach to acupuncture based upon anatomical structure and function. It involves orthopaedic assessments to diagnose the imbalanced meridian or muscles groups. The needling is focussed on traditional acupuncture points, local tender points (ahshi points), trigger points, motor points and address the muscle spindle fibers. Orthopedic acupuncture is great for acute and chronic muscle injuries due to trauma and athletic injuries. It is very effective for athletic performance and post-surgical rehabilitation. It improves circulation, the rate of healing and recovery and has a dramatic effect on reducing inflammation. The needles are more stimulating and often combined with electric stimulation and various physical manipulations (stretching, muscle work, deep tissue and range of motion work).

A motor point is the point where the motor nerve enters the muscle. On entering the muscle, the nerve branches off into motor units and then onto motor end plates that enervate the many muscle fibers that cause contraction. When a muscle is torn, the electrical activity is disrupted due to trauma of the nerve fibers in the muscle. Nerve tissue regeneration, although slower, is much like muscle tissue repair in that it can be hindered by Qi and Blood stagnation and scar tissue formation, but subsequently benefited through treatment. It is not uncommon for an untreated previously torn muscle to test weak to manual muscle testing even after a year from the initial injury. A muscle injury can inhibit the nerve's action potential on the muscle creating less muscle strength. The muscle's loss of strength is directly proportional to the amount of tissue damage affecting the nerve's action potential and is inversely proportional once treatment has begun.

Needling the muscle's motor point activates the action potential and "jump starts" the muscle. A weak muscle upon manual muscle testing can be immediately strengthened once the motor point has been needled. For best results, the practitioner should look or feel for the muscle to actually jump when needling the motor point. This technique can be used at any stage of muscle injury healing with the consideration that the motor point's location is not at the site of injury when the inflammatory process is present. The application of an electrical stimulus, via an electrode, will cause the contraction of an underlying muscle.

A trigger point is a specific point or area where, if stimulated by touch, pain, or pressure, a painful response will be induced. This is helpful in diagnosing an imbalance and treating an underlying pathology. They can be described as hyperirritable spots in skeletal muscle that are associated with palpable nodules in bands of muscle fibers. Palpable nodules are small contraction knots and a common cause of pain due to inhibition of muscle lengthening and mis-alignment of muscle fibers. Compression of a trigger point may elicit local tenderness, referred pain, or local twitch response. The local twitch response is not the same as a muscle spasm. This is because a muscle spasm refers to the entire muscle entirely contracting whereas the local twitch response also refers to the entire muscle but only involves a small twitch - no contraction.

Muscle spindles are sensory receptors within the belly of a muscle, which primarily detect changes in the length of this muscle. They convey length information to the central nervous system via sensory neurons and can often become dysfunctional after injury. Changes in length detected by muscle spindles plays an important role in regulating the contraction of muscles, by preventing unwanted stretching. Coincidentally in an unbalanced state the spindle fibers can cause a muscle to become locked in a shortened position leading to pain and structural imbalance. Acupuncture is one of the quickest ways to restore muscle

balance. When acupuncture is used at specific sites, the muscle spindles are reset, and then that balance is reawakened.

Though traditional sports medicine can also help with proprioception by doing exercises, results are greatly enhanced when sports acupuncture is applied prior to therapeutic exercise. When you insert a needle to a motor point region, it changes the awareness that the muscle reports to the central nervous system, and that is completely different. This ability to fine-tune and restore the body's balance makes sports acupuncture and traditional Chinese medicine a viable preventative therapy that greatly enhances sports medicine exercises.

Players come to see me for injury prevention by way of balancing their opposing muscle groups - especially to work on common sports injury points. Combining sports medicine with traditional Chinese medicine isæ actually very popular, but many athletes may not be telling the media or their trainers that they're getting it. Physician and Sports Medicine reported that a study conducted in 1993 revealed that 72 percent of athletes used some type of holistic unconventional therapy and did not tell their physicians that they had done so. I've seen golf drives improve, boxer's jabs speed up and recovery time shrink.

Sports acupuncture is not superior to traditional sports medicine techniques. Rather it acts to complement other techniques by filling in the gap where the other may be lacking. It is important to take individual differences between both injuries and people into account before choosing a recovery technique. Athletes especially need to be balanced and take care of their bodies and this is what acupuncture is all about.