

The Trigger Point and Myofascial Pain

There are approximately 400 muscles in the human body contracting and relaxing repeatedly during our waking moments. Many times, we ask our bodies to perform activities that put tremendous stress on our muscles – sometimes to the point of injury. Thus, the muscle is susceptible to overuse, fatigue, strain and even small tears that can all present as painful areas in the muscle.

The **trigger point** is simply defined as a focal area of tenderness in muscle or associated soft tissues. The term “trigger” describes the tendency of these tender areas to produce pain in other surrounding areas of the body when pressure is applied to these points. This is also known as **referred pain**.

Any muscle of the body can develop a single or multiple trigger points. Some of the more commonly involved muscles include those in the neck, shoulders, upper and lower back, hips and buttocks. An individual may have only one or several trigger points at one time. These trigger points may sometimes be felt as a tight band or “knot” under the skin.

Myofascial pain (“myo” = muscle, “fascial” = connective tissue) is the name given to the syndrome of muscle pain that has trigger points as a characteristic finding. **Fibromyalgia** is a syndrome that consists of multiple tender points involving specific areas of the body. Other associated symptoms that may occur are fatigue, stiffness and sleep disturbance.

The **cause** of trigger points is believed to be local trauma to the muscle, whether it is from overstretching, overuse, deconditioning, or a medical illness that predisposes the muscle to injury (such as poor circulation). The trigger point is a relatively common finding in patients who have had muscle or soft tissue trauma with pain that persists long after the original injury. It is important to note, however, that continued pain coming from a trigger point does not mean that there is more damage being done to the muscle. In fact, most trigger points occur in otherwise healthy muscle.

Treatment of trigger points begins most importantly with good muscle health. This includes a regular **exercise program**, which promotes normal lengthening and contracting of the muscle through range-of-motion, stretching and strengthening exercises. **Aerobic conditioning** is exercise that improves cardiopulmonary fitness (such as walking, swimming and cycling) and is important for building muscle endurance. It also improves blood flow to the muscle, thereby increasing the supply of oxygen and nutrients and more effectively carrying away the normal metabolic by-products of muscle contraction (such as lactic acid). Emphasis is also placed on the proper use and the avoidance of increased stress on the muscle through correct posture, body mechanics and relaxation techniques. The use of ice, heat and massage can also be tried in conjunction with exercise to help relieve symptoms.

If a therapeutic exercise program is not completely effective in treating trigger points alone, other options exist. These include **trigger point injections**, which consist of using a fine needle to inject small amounts of an anesthetic, and occasionally cortisone, into the trigger point. This can be a very helpful treatment in reducing pain and allowing better stretching of the muscle.

Other possibilities include the use of certain medications, such as anti-inflammatories or anti-depressants that help to decrease pain, relax muscle and improve sleep. The specific medicines used are dependent on the physician's clinical judgment.

Myofascial pain may be chronic and quite bothersome at times, but can usually be well-managed with a proper exercise program to maintain good muscle health.