

Myofascial pain syndrome is characterized by multiple areas of localized musculoskeletal pain and tenderness in association with tender points. The pain is deep and aching and may be accompanied by a burning sensation. Myofascial pain may be regional and follow trauma, overuse, or prolonged static contraction of a muscle or muscle group, which may occur when an individual is reading or writing at a desk or working at a computer. In addition, this syndrome may be associated with underlying osteoarthritis of the neck or low back. Pain may be referred from tender points to defined areas distant from the area of original tenderness. Palpation of the tender point reproduces or accentuates the pain. The tender points are usually located in the center of a muscle belly, but they can occur at other sites such as costosternal junctions, the xiphoid process, ligamentous and tendinous insertions, fascia, and fatty areas. Tender point sites in muscle have been described as feeling indurated and taut, and palpation may cause the muscle to twitch. These findings, however, have been shown not to be unique to myofascial pain syndrome: in a controlled study, they were also present in some "normal" subjects. Myofascial pain most often involves the posterior neck, low back, shoulders, and chest. Chronic pain in the muscles of the posterior neck may involve referral of pain from a tender point in the erector neck muscle or upper trapezius to the head, leading to persistent headaches that may last for days. Tender points in the paraspinal muscles of the low back may refer pain to the buttock. Pain may be referred down the leg from a tender point in the gluteus medius and can mimic sciatica. A tender point in the infraspinatus muscle may produce local and referred pain over the lateral deltoid and down the outside of the arm into the hand. Injection of a local anesthetic such as 1% lidocaine into the tender point site often results in transient pain relief. Another useful technique is first to spray an agent such as ethyl chloride from the tender point toward the area of referred pain and then to stretch the muscle. This maneuver may need to be repeated several times. Massage and application of ultrasound to the affected area also may be beneficial. Patients should be instructed in methods to prevent muscle stresses related to work and recreation. The prognosis in most patients is good. In some patients, regionally localized myofascial pain