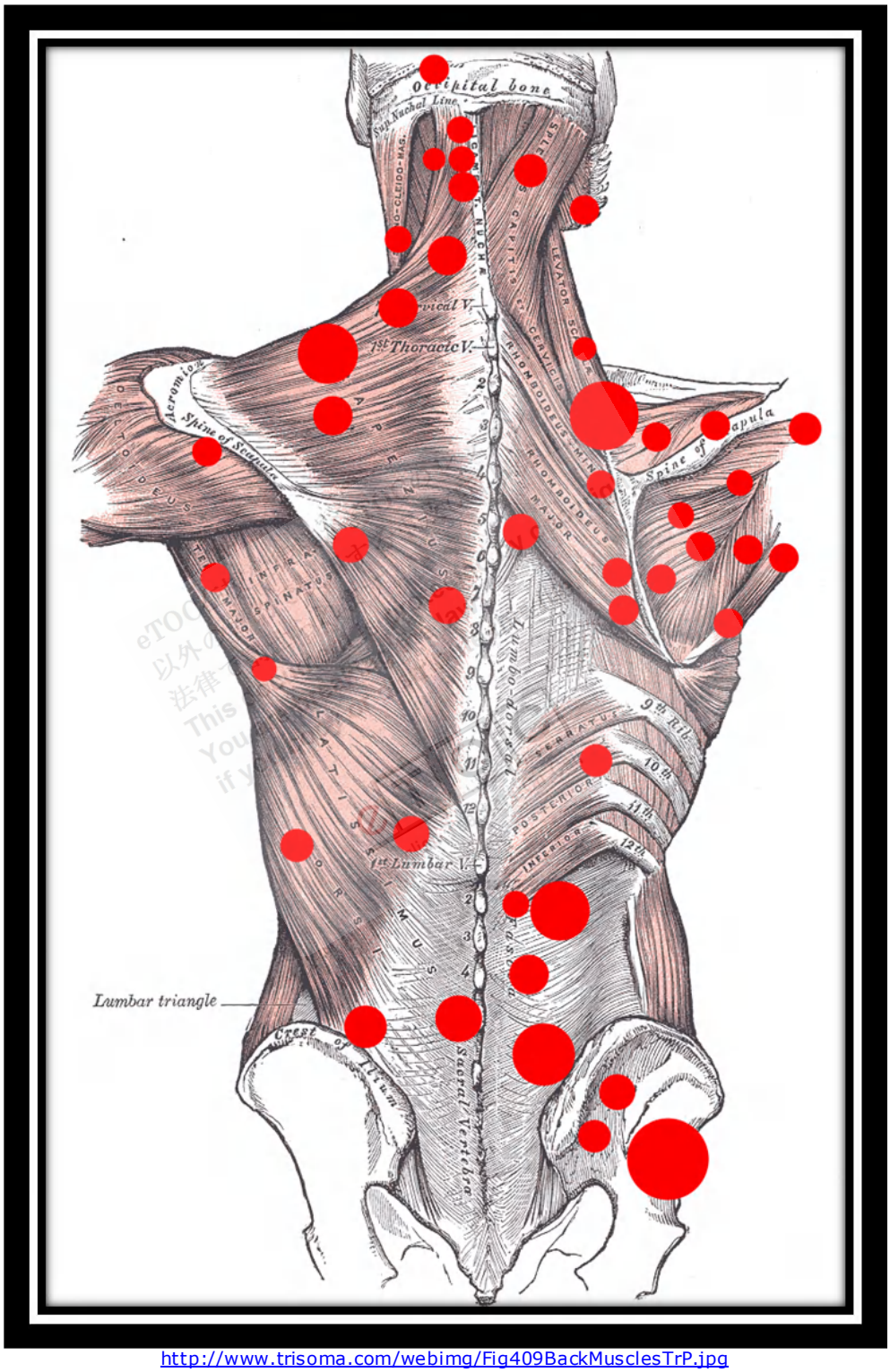
Myofascial Pain Syndrome



http://www.trisoma.com/webimg/Fig409BackMusclesTrP.jpg

Myofascial pain syndrome can occur in patients with a normal temporomandibular joint. It is caused by tension, fatigue, or spasm in the masticatory muscles (medial or internal and lateral or external pterygoids, temporalis, and masseter). Symptoms include bruxism, pain and tenderness in and around the masticatory apparatus or referred to other locations in the head and neck, and, often, abnormalities of jaw mobility. Diagnosis is based on history and physical examination. Conservative treatment, including analgesics, muscle relaxation, habit modification, and bite splinting, usually is effective.

This syndrome is the most common disorder affecting the temporomandibular region. It is more common among women and has a bimodal age distribution in the early 20s and around menopause. The muscle spasm causing the disorder usually is the result of nocturnal bruxism (clenching or grinding of the teeth). Whether bruxism is caused by irregular tooth contacts, emotional stress, or sleep disorders is controversial. Bruxism usually has a multifactorial etiology. Myofascial pain syndrome is not limited to the muscles of mastication. It can occur anywhere in the body, most commonly involving muscles in the neck and back.

Symptoms and Signs

Symptoms include pain and tenderness of the masticatory muscles and often pain and limitation of jaw excursion. Nocturnal bruxism may lead to headache that is more severe on awakening and that gradually subsides during the day. Such pain should be distinguished from temporal arteritis. Daytime symptoms, including headache, may worsen if bruxism continues throughout the day.

The jaw deviates when the mouth opens but usually not as suddenly or always at the same point of opening as it does with internal joint derangement. Exerting gentle pressure, the examiner can open the patient's mouth another 1 to 3 mm beyond unaided maximum opening.

Diagnosis

- Clinical evaluation

A simple test may aid the diagnosis: Tongue blades of 2 or 3 thicknesses are placed between the rear molars on each side, and the patient is asked to bite down gently. The distraction produced in the joint space may ease the

symptoms. X-rays usually do not help except to rule out arthritis. If temporal arteritis is suspected, ESR is measured.

Treatment

- Mild analgesics
- Splint or mouth guard
- An anxiolytic at bedtime considered
- Physical therapy modalities considered

A plastic splint or mouth guard from the dentist can keep teeth from contacting each other and prevent the damages of bruxism. Comfortable, heat-moldable splints are available from many sporting goods stores or drugstores. Low doses of a benzodiazepine at bedtime are often effective for acute exacerbations and temporary relief of symptoms. Mild analgesics, such as NSAIDs or acetaminophen, are indicated. Cyclobenzaprine may help muscle relaxation in some people. Because the condition is chronic, opioids should not be used, except perhaps briefly for acute exacerbations. The patient must learn to stop clenching the jaw and grinding the teeth. Hard-to-chew foods and chewing gum should be avoided. Physical therapy, biofeedback to encourage relaxation, and counseling help some patients. Physical modalities include transcutaneous electric nerve stimulation and "spray and stretch," in which the jaw is stretched open after the skin over the painful area has been chilled with ice or sprayed with a skin refrigerant, such as ethyl chloride. Botulinum toxin has recently been used successfully to relieve muscle spasm in myofascial pain syndrome. Most patients, even if untreated, stop having significant symptoms within 2 to 3 yr.

Reference: http://www.merckmanuals.com