

## Myofacial Pain Dysfunction Syndrome - A Review

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### ABSTRACT

Myofascial pain dysfunction syndrome or Temporomandibular joint syndrome is the most common cause of fascial pain after tooth ache. It is most common in females. The MPD type of temporomandibular disorder is not associated with destructive changes in the temporomandibular joint. Usually anxious and stressed persons and those with bruxism are commonly affected. The patients complain of pain, muscle tenderness, clicking noise in TMJ and limitation in movement of TMJ. Also otalgia, pain and stiffness in the neck, shoulder pain and dizziness were encountered. Mostly temporomandibular joint disorders are self limiting. Certain medications, selfcare practices physical therapy etc can be given.

**Keywords:** MPDS, Pain, Temporomandibular disorders.

### INTRODUCTION

Myofascial pain dysfunction syndrome is common pain disorder of muscle. The pain is referred from trigger points from within myofascial structures or from distant area from pain.<sup>1</sup> It is common cause of fascial pain after toothache. Temporomandibular disorders are classified as those secondary to myofascial pain and dysfunction and secondary to true articular disease. The MPD type is associated with pain without destructive changes of TMJ on radiograph.<sup>2</sup>

#### Etiology

Multifactorial causes are said for MPDS. Malocclusion, jaw clenching, bruxism, increased pain sensitivity and stress and anxiety. The muscular hyperactivity and dysfunction due to malocclusion are the factors responsible for the clinical manifestations. TMD of articular origin is of disc

displacement commonly. Also degenerative joint disorders, rheumatoid arthritis, ankylosis, dislocation, infection, neoplasia and congenital anomalies cause pain.

According to psychophysiological theory, muscle spasm is a factor for myofascial pain dysfunction syndrome. Rather than mechanical factors emotional factors are primary etiologic factors in stimulating chronic oral habits that produce muscle fatigue.<sup>3</sup>

#### Clinical presentation

Temporomandibular disorder commonly affects females. Patients may have pain, muscle tenderness, clicking noise in the TMJ and limitation of jaw motion. Sometimes deviation on opening may be present. Pain is usually periauricular radiating to head. Pain may be unilateral or bilateral. The pain is said to be severe during increased stress.

They may also be associated with otalgia, neck pain, shoulder pain and dizziness. A review of 164 patients showed clinical features of tenderness at points in firm bands of skeletal muscle, specific patterns of pain associated with each trigger point, frequent emotional, postural and behavioral contributing factors.<sup>1</sup>

Differential diagnosis may be cluster headache, migraine headache, post herpetic neuralgia, temporal cell arteritis, trigeminal neuralgia and middle ear infection. Myofascial pain is defined as pain that originates from myofascial trigger points in skeletal muscle. It is prevalent in regional musculoskeletal pain syndromes, either alone or in combination with other pain generators.<sup>4</sup> Patients with myofascial pain dysfunction syndrome are said to be of high levels of psychological distress.<sup>5</sup>

#### Investigations (Laboratory/ Radiography)

If infection is suspected a complete blood count is to be done to detect rheumatic factor, ESR, antinuclear antibody and other specific antibody. Uric acid should be checked for gout.<sup>2</sup>

TMJ radiography is to correlate the etiology of TMD in case of rheumatoid arthritis and

seronegative spondyloarthropathies, conventional radiographs show erosions, osteophytes, subchondral bony sclerosis and condylar glenoid fossa remodelling.<sup>2</sup>

#### Treatment

Most of the TMDs are self-limiting. Conservative treatments such as self-care practices, rehabilitations to relieve muscle spasms. NSAIDs should be used for short term basis. Various modalities include patient education, medication, physical therapy, splints, psychological counselling, relaxation techniques, biofeedback, hypnotherapy, acupuncture and arthrocentesis.<sup>2</sup> In a study of 127 patients treated for MPDS over a 30 month period only 6 patients did not make a 90% recovery in 3 to 4 months and 10% patients treated had symptoms of MPDS for a period longer than 5 years.<sup>6</sup>

In a study of 23 patients with myofascial pain dysfunction syndrome receiving either biofeedback training or tricyclic antidepressants or both and their success with treatment was correlated with psychological factors. Muscle relaxation using electromyographic biofeedback was successful in relieving myofascial pain dysfunction syndrome in 15 patients out of 23 patients. Others were helped by tricyclic antidepressants.<sup>7</sup>

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