WCB Alberta – Medical Advisory Guidelines
Myofascial Pain Syndrome (Regional Pain Syndrome) - M2.2

Definition of condition: Myofascial pain syndrome has no uniformly accepted definition but is characterized as a regional muscle pain syndrome accompanied by Trigger Points.25 A Trigger Point is a hyperirritable spot within a taut band of skeletal muscle or muscle fascia which is painful on compression and gives rise to characteristic referral pain patterns, tenderness and autonomic phenomena. 23, 25

Issue statement: Although clear association between specific workplace activities and myofascial pain syndrome has not been established, onset of myofascial pain syndrome may follow trauma.

For diagnosis and management purposes Fibromyalgia and Myofascial Pain are treated as two separate syndromes.

WCB-Alberta position

1. Work relationship criteria

The etiology of Myofascial Pain Syndrome is unknown. Myofascial Pain Syndrome may be related to work when the identified active trigger point is present in the region injured in a direct traumatic incident or repetitive muscular strain and where there is continuous medical evidence and reporting.

Myofascial Pain Syndrome has been associated with a variety of factors which can occur at work or during leisure activities. Development of active trigger points can be associated with mechanical, physical, and psychological stressors, as well as socioeconomic factors. 23 Mechanical and physical stressors such as over-stretching, and direct trauma, are of sudden onset. Gradual onset follows overuse, repetitive strain or abnormal assumed postures. Psychological stressors include depression, tension from anxiety and secondary gain.

Demographic observations indicate laborers who exercise muscles heavily are less likely to develop active trigger points than sedentary workers who indulge in occasional episodes of vigorous physical activity. 23 Anecdotal reports indicate that workers deconditioned prior to beginning work may be more prone to developing trigger points or other musculoskeletal injuries.

2. Clinical Criteria

There are no clear criteria. As described by Travell and Simons* to diagnose an active myofascial trigger point (TP), one looks for:

1. A history of sudden onset during or shortly following acute overload stress, or a history of gradual onset with chronic overload of the affected muscle;
2. Characteristic patterns of pain that are referred from myofascial TPs, patterns that are specific to individual muscles (refer to Appendix A in background paper);
3. Weakness and restriction in the stretch range of motion of the affected muscle;
4. A taut, palpable band in the affected muscle;
5. Exquisite, focal tenderness to digital pressure (the TP) in the band of taut muscle fibers;
6. A local twitch response elicited through snapping palpation or needling of the tender spot (TP);
7. The reproduction of the patient's pain complaint by pressure on, or needling of, the tender spot (TP);
8. The elimination of symptoms by therapy directed specifically to the affected muscles.

Finding a site of local tenderness (Number 5) is essential to the diagnosis but non-specific. Numbers 6 and 7, a local twitch response and pain reproduction, when present, are specific and strongly diagnostic of

a myofascial TP. The more of the remaining findings that are present, the more certain is the diagnosis, which may be recorded as myofasciitis of specific muscles for administrative or insurance purposes.
All individuals will not have all the criteria. Diagnosis for WCB purposes must be confirmed by a specialist in Physiatry, Rheumatology, or Neurology trained and experienced in the diagnosis of Myofascial Pain.

3. Diagnostic criteria

There are no diagnostic tests that confirm the diagnosis of Myofascial Pain. Because of this, Myofascial Pain is often a diagnosis of exclusion.

* Travell, J.G., Simons, D.G. Myofascial Pain and Dysfunction: The Trigger Point Manual. Baltimore; Williams & Wilkins, Volume 1, 1983; Pg 18-19

Recommended Management

1. Education

- stress that patients can function and continue to work
- stress need to keep ambulatory and avoid immobility
- patients need to understand the need for conditioning and strengthening
- patients need to understand the social/psychological factors involved with MPS
- patient must be compliant with the treatment program
- change work habits and posture
- warm up and cool down (pre and post exercise)
- explain referral patterns of pain for specific trigger points

2. Physical methods of treatment

Myofascial Pain Syndrome usually responds to one of the following therapies :

- short rest periods of affected muscle
- slow steady passive stretching
- moist heat application over trigger point
- specific myofascial therapy may include
  a) spraying and stretching the affected muscle,
  b) injection or dry needling trigger point
- progressive exercise program for toning and development of muscle strength and endurance
- ergonomic assessment and changes for optimum positioning
- relaxation therapy or other stress reduction techniques

Efficacy of treatment should be reassessed every 6 weeks.

3. Medical treatment

Drugs

- limited usefulness
- may be useful to treat psychological stressors which could include depression, sleep disturbances or tension from anxiety
- muscle relaxants (e.g. Flexeril) at bedtime or in low dose three times daily may be helpful in acute stage

Others

- psychological assessment to identify psychological factors that may play a role in MPS (depression, anxiety, poor concentration) to allow for effective treatment

4. Fitness to work criteria

- establish whether the worker is able to perform the physical aspects of the job or whether temporary work restrictions are required
- worker usually fit for at least modified employment
- may require
  c) ergonomic assessment
  d) functional capacity assessment
  e) conditioning program (could be home exercise)

5. Permanent clinical impairment criteria

- not anticipated as prognosis usually good