

Madigan Army Medical Center Referral Guidelines

Temporomandibular Disorders

Diagnosis/Definition

Temporomandibular disorders (TMD) constitute multiple diagnoses encompassing a variety of hard and soft tissue disorders that include masticatory muscle dysfunction and internal derangement of the joint itself. Presenting signs and symptoms can be overlapping. The current view of most pain specialists considers TMD in a biopsychosocial model. This model considers all pain dimensions in an integrated fashion and focuses on affective and cognitive factors, recognizing that pain is possible without overt tissue damage.

Approach to treatment is often multidisciplinary. The anatomical location is less relevant than the physiologic processes responsible for the pain. The pathophysiology and treatment is the same whether the pain is from the mouth or other structures within the head and neck. Providers included in the care of these patients might include the primary care physician, neurologist, pain management specialist, general dentist, oral and maxillofacial surgeon and an orofacial pain specialist.

Less than 5% of TMD issues require referral to oral and maxillofacial surgery, as a limited number of entities are amenable to surgical intervention. The mainstay of treatment involves self-care and nonsurgical modalities managed in the primary care/general dentist arena with adjunctive disciplines as needed.

Initial Diagnosis and Management

- Acute management should be evaluated by a thorough focused history and physical examination including measurement of the patient's range of mandibular motion, any noted deviation and the interincisal distance at maximal opening with and without pain. The muscles of mastication should be palpated individually for tenderness. The existence of popping, clicking and crepitus of the joints should be identified. A screening panoramic radiograph should be obtained via the patient's dental provider. Patients should be asked about a history of trauma such as motor vehicle accidents or sports injuries. Patients may report symptoms from headaches to earaches as well as facial myalgias with limited ability to open and chew. Other causes of subjective symptoms should be sought. The signs and symptoms of myofascial pain and internal derangement disorders can overlap.
- Initial treatment for TMD should be conservative and include soft diet with small bites, moist heat or ice to painful areas and NSAIDS. Skeletal muscle relaxants might also be included for initial management. Patients should avoid parafunctional habits such as nail

biting, wide opening with yawning, intentionally popping the joints, gum chewing, sticky food chewing and ice chewing as these can exacerbate the condition.

- Patients may see slow improvement of their symptoms over a few weeks to several months. Discussion of the pathophysiology of the disorder (multifactorial and usually long term microtrauma) and reassurance are helpful.
- Indications for immediate referral to Oral and Maxillofacial Surgery include acute open lock (inability to close mouth), acute trauma to the area or the very rare acute joint infection.

Ongoing Management and Objectives

- Patients with ongoing TMD complaints should be referred to their dentist for additional intervention. An orthotic splint can be fabricated which may ameliorate some of the discomfort. The patient must work closely with the dentist to prevent an irreversible situation.
- Favorable therapeutic outcomes include a level of pain that is of little concern to the patient, improved jaw function and ability to masticate, functional and stable occlusion and limited progression and period of disability.
- Active duty personnel should be referred to the dental clinic to which they are assigned for evaluation and treatment. Other than active duty personnel (active duty family members, retirees and their family members) need to see their civilian dental provider, as treatment in military dental facilities is not available. Splints may be covered by TRICARE or MetLife with preapproval. Beneficiaries are encouraged to check their specific coverage plans.
- Note that Active Duty personnel may require a limited duty profile for a period of time to prevent protective mask wear and chin strap wear that can exacerbate trauma to the joints and muscles.

Indications for Specialty Care or Immediate Referral

- Most TMD patients can be managed in the primary care setting by a primary care physician or a dentist with referral for adjunctive therapy as deemed appropriate.
- Nonsurgical management includes medication, physical therapy, stress reduction therapy and biofeedback, psychological counseling and orthotic appliances. Trigger point injections and acupuncture have also proven to be quite efficacious. Treatment modalities should be employed by qualified providers. Surgical intervention is required less than 5% of the time.
 - Medication regimens might include a trial of NSAIDs as well as a muscle relaxant. Narcotic medication might be indicated for severe pain, but should be closely monitored to minimize overuse or dependency concerns.

- Acute (less than 1 week duration) closed lock (unable to open) patients and patients with open lock (inability to close the mouth-subluxated/dislocated) that cannot be reduced should be referred to the Oral and Maxillofacial Surgery (OMS) resident on call.
- Pathologic changes noted on imaging should also be referred for evaluation to OMS.
- Patients who fail a trial of comprehensive nonsurgical management should be referred to Oral and Maxillofacial Surgery. Other than active duty (OTAD) personnel will be accepted on an extremely limited space available basis. Current priorities of care do not allow for the routine acceptance of OTAD patients into the practice.

Criteria for Return to Primary Care

- Resolution of anatomic malformations through surgery
- Nonsurgical patients will be returned to their primary care provider (physician or dentist) for continued management

Summary

TMDs are broadly divided into muscle or joint disorders, but the conditions can co-exist. Self-care and a combination of nonsurgical treatment modalities are sufficient manage most patients with TMD. When surgical intervention is required, minimally invasive procedures have proven to be efficacious for the majority of cases.

References:

Statement by the American Association of Oral and Maxillofacial Surgeons Concerning the Management of Selected Clinical Conditions and Associated Clinical Procedures (Temporomandibular Disorders). Parameters of Care, Oral and Maxillofacial Surgery. March 2010.

American Association of Oral and Maxillofacial Surgeons (AAOMS) Surgical Update, Vol 17, Issue 1

Orofacial Pain: Guidelines for Assessment, Diagnosis, and Management, fourth edition. Edited by Reny de Leeuw, DDS, PhD. The American Academy of Orofacial Pain

Orofacial Pain and Dysfunction. Oral and Maxillofacial Surgery Clinics of North America. Vol 20, Number 2, May 2008.

Last Review for this Guideline: **September 2012**
Referral Guidelines require review every three years.

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Clinical Practice and Referral Guidelines Administrator