

Temporomandibular Disorders in the Medical Practice

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Patients suffering with various orofacial pain conditions are likely to seek advice and treatment from a family physician. Temporomandibular disorders (TMD) are common in the general population, and the clinician should be aware of the common associated signs and symptoms so that proper therapy can be provided. The family physician can often provide initial therapies that are effective in reducing TMD symptoms. In some instances, it is appropriate for the family physician to refer the patient to a dentist for a more comprehensive

evaluation of the masticatory system.

This article describes the common patient complaints associated with TM disorders. A few simple therapies are discussed along with suggestions regarding the appropriate time for referral to a dentist for a thorough dental evaluation.

Key words. Temporomandibular joint; masticatory muscles; myofascial pain syndromes; referral and consultation. (*J Fam Pract* 1996; 43:347-356)

Temporomandibular disorder (TMD) is a collective term that includes a number of clinical complaints involving the muscles of mastication, the temporomandibular joint (TMJ), and associated orofacial structures. Other commonly used terms are Costen syndrome,¹ TMJ dysfunction,² and craniomandibular disorders.³ Temporomandibular disorders are a major cause of nondental pain in the orofacial region and are considered to be a subclassification of musculoskeletal disorders.⁴ In many patients with TMD the most common complaint is not about the temporomandibular joints but rather the muscles of mastication.⁵ Therefore, the terms TMJ dysfunction or TMJ disorder are actually inappropriate for many of these complaints. It is for this reason that the American Dental Association adopted the term *temporomandibular disorder*.⁶

Signs and symptoms associated with temporomandibular disorders are a common source of pain complaints in the head and orofacial structures. These complaints can be associated with general joint problems and somatization.⁷ Approximately

50% of patients suffering with TM disorders do not first consult with a dentist, but seek advice for the problem from a physician.⁷ The family physician should be able to appropriately diagnose and, in some cases, initiate treatment for many TM disorders.

The purpose of this article is to assist the physician in identifying the common clinical characteristics of TMD and to recommend some treatment considerations. In many instances the physician can provide valuable information and simple therapies that will reduce the patient's TMD symptoms. In other instances, it is appropriate to refer the patient to a dentist for additional evaluation and treatment.

EPIDEMIOLOGIC FINDINGS

Cross-sectional population-based studies reveal that 40% to 75% of adult populations have at least one sign of temporomandibular joint dysfunction (jaw movement abnormalities, joint noise, tenderness on palpation, etc) and approximately 33% have at least one symptom (face pain, joint pain, etc).^{7,8} Many of these signs and symptoms are not troublesome for the individual, with only 3% to 7% of the population seeking any advice or care.^{7,9} Although in the general population women seem to have only a slightly greater incidence of TMD symptoms,^{7,10-12} women seek care for TMD more often than men at a ratio ranging from 3:1 to 9:1.¹³⁻¹⁵

It is a common belief that TMD symptoms

Submitted, revised, July 15, 1996.

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TABLE 1

Common Primary and Secondary Symptoms Associated with Temporomandibular Disorders
Primary symptoms

Facial muscle pain
 Preauricular (TMJ) pain
 TMJ sounds: jaw clicking, popping, catching, locking
 Limited mouth opening
 Increased pain associated with chewing

Secondary symptoms

Earache
 Headache
 Neck ache

progress over time, although this has not been well documented. It has been reported that dysfunction associated with TMD and many physical limitations seem to steadily decrease in prevalence and severity in the older population.^{13,14,16-19} It appears that many temporomandibular disorders are self-limiting, or are associated with symptoms that fluctuate over time without evidence of progression.^{20,21} Even though many of these disorders are self-limiting, the health care provider should provide conservative therapies that will minimize the patient's painful experience.

SIGNS AND SYMPTOMS

The primary signs and symptoms associated with TMD originate from the masticatory structures and are associated with jaw function (Table 1). Pain when opening the mouth or when chewing are common. Some individuals will even report difficulty speaking or singing. Patients often report pain in the preauricular areas, face, and/or temples. TMJ sounds are frequently described as clicking, popping, grating, or crepitus, and the patient may report locking of the jaw during opening or closing. Patients frequently report painful jaw muscles and, on occasion, may even describe a sudden change in their bite

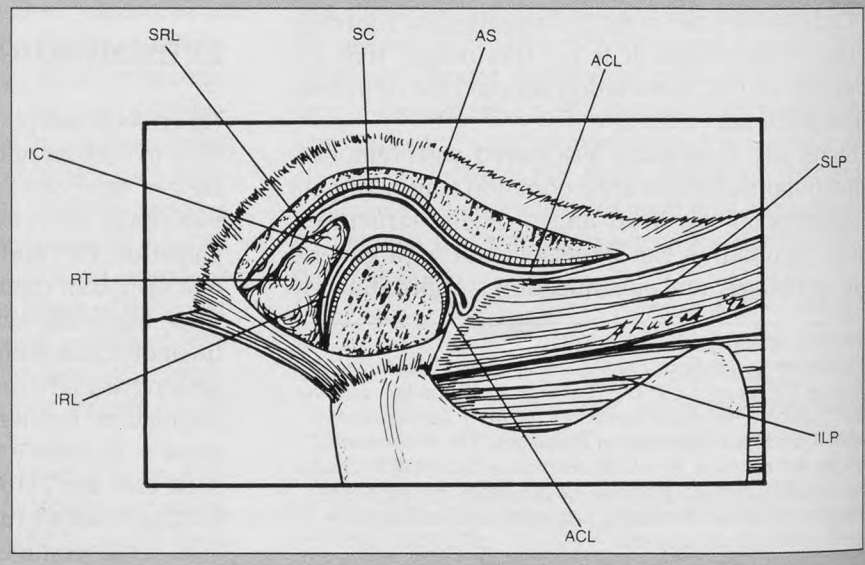
coincident with the onset of the painful condition.

It is important to appreciate that pain associated with most TM disorders is increased with jaw function. Since this is a condition of the musculoskeletal structures, function of these structures generally increases the pain. When a patient's pain complaint is not influenced by jaw function, other sources of orofacial pain should be suspected.

The spectrum of TMD often includes commonly associated complaints such as headache, neck ache, or earache. These associated complaints are often referred pains and must be differentiated from primary pains. As a general rule, referred pains associated with TM disorders are increased with any activity that provokes the TMD pain.²² Therefore, if the patient reports that the headache is aggravated by jaw function, it may very well represent a secondary pain related to the TM disorder. Likewise, if the secondary symptom is unaffected by jaw use, one should question its relationship to the TM disorder and be suspicious of two separate pain conditions. Pain or dysfunction due to nonmusculoskeletal causes such as otolaryngologic, neurologic, vascular, neoplastic, or infectious disease in the orofacial

FIGURE 1

A lateral view of the temporomandibular joint showing the following anatomic components: RT denotes retrodiscal tissues; SRL, superior retrodiscal lamina (elastic); IRL, inferior retrodiscal lamina (collagenous); ACL, anterior capsular ligament (collagenous); SLP and ILP, superior and inferior lateral pterygoid muscles; AS, articular surface; SC and IC, superior and inferior joint cavity; the discal (collateral) ligament has not been drawn. From Okeson JP. *Management of Temporomandibular Disorders and Occlusion*. Ed 3. Mosby-Year Book Publishers, St Louis, Mo, page 11. Used by permission of Mosby-Year Book Publishers.



region is not considered a primary TMD even though musculoskeletal pain may be present. It should be remembered, however, that TMDs often coexist with other craniofacial and orofacial pain disorders.

ANATOMY AND PATHOPHYSIOLOGY

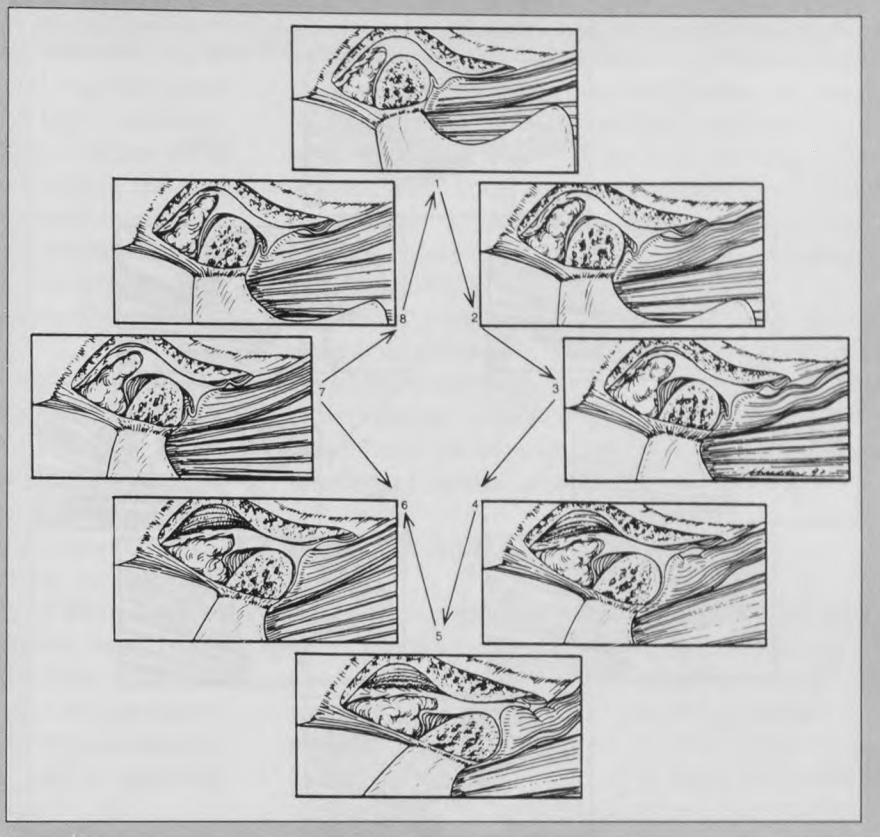
The temporomandibular joint is formed by the mandibular condyle fitting into the mandibular fossa of the temporal bone. The movement of this joint is quite complex as it allows hinging movement in one plane (a ginglymoid joint) and at the same time allows gliding movements (an arthrodial joint) in another plane. The TMJ is thus technically considered a ginglymoarthrodial joint.

Separating these two bones from direct articulation is the articular disc (Figure 1). The articular disc is composed of dense fibrous connective tissue devoid of any blood vessels or nerve fibers. The articular disc is attached posteriorly to a region of loose connective tissue that is highly vascularized and well innervated, known as the retrodiscal tissue. Superiorly, the retrodiscal tissue is bordered by a lamina of connective tissue that contains many elastic fibers, the superior retrodiscal lamina. Since this region consists of the two laminae, it has been referred to as the bilaminar zone. The anterior region of the disc is attached to the superior lateral pterygoid muscle.

The medial and lateral borders of the articular disc are attached to the poles of the condyle by collateral ligaments. These ligaments permit the disc to rotate anteriorly and posteriorly on the articular surface of the condyle when the mouth is opened and closed. During normal opening and closing, the disc is maintained between the condyle and fossa, thus minimizing loading forces applied to the bony artic-

FIGURE 2

Normal functional movement of the condyle and disc during the full range of opening and closing. Note that the disc is rotated posteriorly on the condyle as the condyle is translated out of the fossa. The closing movement is the exact opposite of opening. From Okeson JP. Management of Temporomandibular Disorders and Occlusion. Ed 3. Mosby-Year Book Publishers, St Louis, Mo, pages 24-25. Used by permission of Mosby-Year Book Publishers.

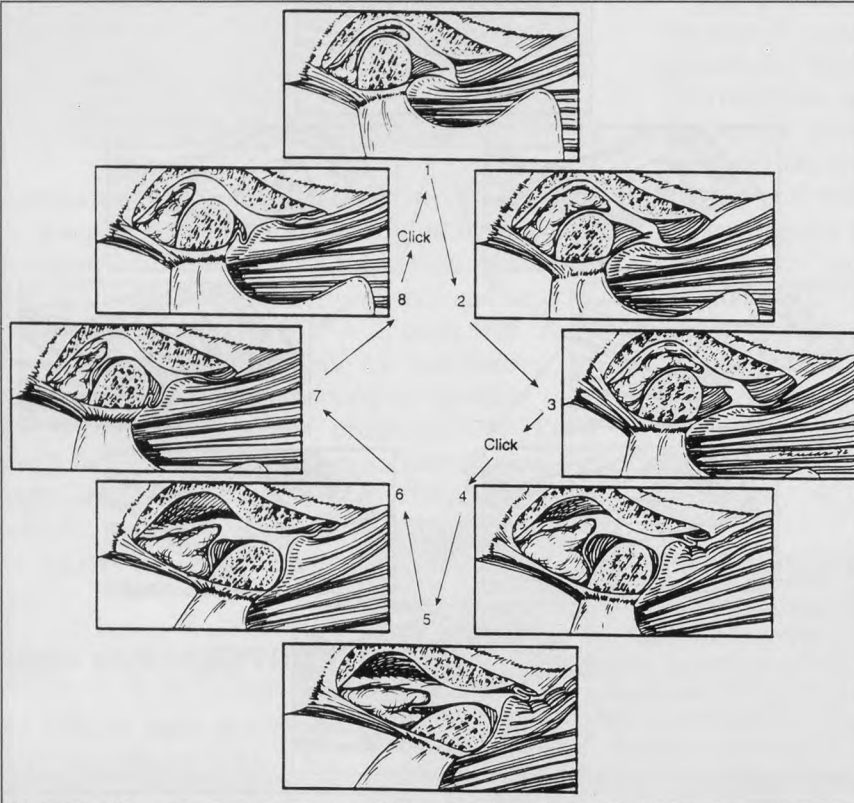


ulations (Figure 2).

The energy required to move the mandible and permit function of the masticatory system is provided by muscles. Four pairs of muscles make up a group called the muscles of mastication: the masseter, temporalis, medial pterygoid, and lateral pterygoid. Although not considered to be muscles of mastication, the digastric muscles also play an important role in mandibular function. The masseter, temporalis, and medial pterygoid muscles elevate the mandible and therefore provide the major forces used for chewing and other jaw functions. The elevator muscles are quite powerful and have been recorded to provide up to 975 pounds of biting force.²³ The lateral pterygoid muscles provide protrusive movement of the mandible, and the digastric muscles serve to depress the mandible (open the mouth).

FIGURE 3

Figure 3. Note that in drawing number 1, the disc is displaced from its normal position between the condyle and the fossa. Observe that during opening the condyle passes over the posterior border of the disc onto the intermediate area of the disc, thus reducing the displaced disc. This results in a clicking sound heard (felt) in the joint. A similar sound is heard (felt) as the mouth is closed when the disc is once again displaced. From Okeson JP. *Management of Temporomandibular Disorders and Occlusion*. Ed 3. Mosby-Year Book Publishers, St Louis, Mo, page 202. Used by permission of Mosby-Year Book Publishers.



When discussing the pathophysiology of TMD, two main categories should be considered: joint pathophysiology and muscle pathophysiology. Since causative factors and treatment strategies are different for these conditions, they will be discussed separately.

PATHOPHYSIOLOGY OF INTRACAPSULAR TMJ PAIN DISORDERS

Several common arthritic conditions such as rheumatoid arthritis, traumatic arthritis, hyperuricemia, and psoriatic arthritis can affect the temporomandibular joint. These conditions, however, are not nearly as common as local osteoarthritis. As with most other joints, osteoarthritis results from overloading the articular surface of the joint, thus

breaking down the articular cartilage and ultimately affecting the subarticular bone. In patients with TMJ disorder, this overloading commonly occurs as a result of an alteration in the morphology and position of the articular disc. In the healthy joint, the disc maintains its position on the condyle during movement because of its morphology (ie, the thicker anterior and posterior borders) and interarticular pressure maintained by the elevator muscles. If, however, the morphology of the disc is altered and the discal ligaments become elongated, the disc can be displaced from its normal position between the condyle and fossa. If the disc is displaced, normal opening and closing of the mouth can result in an unusual translatory movement between the condyle and the disc, which is felt as click or pop (Figure 3).²⁴ Disc displacements that result in joint sounds may or may not be painful. When pain is present, it is thought to be related to either loading forces applied to the highly vascularized retrodiscal tissues or a general inflammatory response of the surrounding soft tissues (capsulitis or synovitis).

PATHOPHYSIOLOGY OF MASTICATORY MUSCLE PAIN DISORDERS

The muscles of mastication are a common source of TMD pain. Understanding the pathophysiology of muscle pain, however, is complex and still not well understood.²⁵ The simple explanation of muscle spasm does not account for most TMD muscle pain complaints.^{26,27} It appears that a better explanation would include a central nervous system effect on the muscle that results in an increase in peripheral nociceptive activity originating from the muscle tissue itself. This explanation more accurately accounts for the high levels of emotional stress that are commonly associated with TMD

muscle pain complaints. In other words, an increase in emotional stress activates the autonomic nervous system, which in turn seems to be associated with changes in muscle nociception.²⁸⁻³⁰

Masticatory muscle pain conditions are further complicated when one considers the unique masticatory muscle activity known as *bruxism*. Bruxism is the subconscious, often rhythmic grinding or gnashing of the teeth. This type of muscle activity is considered to be parafunctional and may also occur as a simple static loading of the teeth known as clenching. This activity commonly occurs while sleeping but may also be present during the day. These parafunctional activities alone can represent a significant source of masticatory muscle pain, and certainly bruxism in the presence of CNS-induced muscle pain can further accentuate the patient's muscle pain complaints.

CAUSATIVE CONSIDERATIONS OF TMD

Since TMD represents a group of disorders, there are multiple causative factors that may be associated with it. Problems arising from intracapsular conditions (ie, clicking, popping, catching, locking) may be associated with various types of trauma. Gross trauma, such as a blow to the chin, can immediately alter ligamentous structures of the joint, leading to joints sounds.³¹⁻³⁴ Trauma may also be associated with more subtle trauma such as stretching, twisting, or compressing forces during eating, yawning, yelling, or prolonged mouth opening.³⁵

When the patient's chief complaint is muscle pain, factors other than trauma should be considered. Masticatory muscle pain disorders have origins similar to other muscle pain disorders of the neck and back.^{36,37} Emotional stress seems to play a significant role for many patients.^{38,39} This may explain why patients often report that their painful symptoms fluctuate greatly over time. Although most patients with TMD do not have a major psychiatric disorder, psychologic factors can certainly enhance the pain condition.⁴⁰⁻⁴² The clinician needs to consider such factors as anxiety, depression, secondary pain, somatization, and hypochondriasis. Psychosocial factors may predispose certain individuals to TMD and may also perpetuate TMD once symptoms have become established. A careful consideration of psychosocial factors is therefore important in the evaluation and treatment of every TMD patient.

Temporomandibular disorders have a few unique

causative factors that differentiate them from other musculoskeletal disorders. One such factor is the occlusal relationship of the teeth. Traditionally it was felt that malocclusion was the primary factor responsible for TMD. Recent investigations do not necessarily support this concept.⁴³⁻⁴⁷ There are, however, certain instances when occlusal instability of the teeth can contribute to a TM disorder. This may be true in patients both with and without teeth. Poorly fitting dental prosthesis can also contribute to occlusal instability. The occlusal condition should be suspected especially if the pain problem began with a change in the patient's occlusion (ie, during a dental appointment). Since the occlusal condition can contribute to a TMD,^{48,49} it should be evaluated in patients with TMD.

Another unique cause of TMD is *bruxism*. As just described, bruxism is the subconscious grinding or clenching of the teeth. Although this activity may be closely related to muscle pain, the association may be difficult to identify, since most patients are unaware of their bruxing or clenching activities.²⁴

HISTORY AND EXAMINATION

All patients reporting pain in the orofacial structures should be screened for TMD. This can be accomplished with a brief directed history and physical examination. The screening questions and examination are performed to rule in or out the possibility of a TMD.⁴ If a positive response is found, a more extensive history and examination is indicated.²² Table 2 lists questions that should be asked during a screening assessment for TMD. Any positive response should be followed by additional clarifying questions.

Patients experiencing orofacial pain should also be briefly examined for any clinical signs associated with TMD. The clinician can easily palpate a few sites to evaluate tenderness or pain as well as assess for jaw mobility. The masseter muscles can be palpated bilaterally while asking the patient to report any pain or tenderness (Figure 4). The same assessment should be made for the temporal regions (Figure 5) as well as the preauricular (TMJ) areas (Figure 6). While the hands are over the preauricular areas, the patient should be asked to repeatedly open and close the mouth. The presence of joints sounds should be noted and whether these sounds are associated with joint pain.

A simple measurement of mouth opening should

TABLE 2

Recommended Screening Questionnaire for Patients with Temporomandibular Disorders

1. Do you have difficulty, pain, or both when opening your mouth, for instance when yawning?
2. Does your jaw "get stuck," "locked," or "go out"?
3. Do you have difficulty or pain (or both) when chewing, talking, or using your jaws?
4. Are you aware of noises in the jaw joints?
5. Do your jaws regularly feel stiff, tight, or tired?
6. Do you have pain in or about the ears, temples, or cheeks?
7. Do you have frequent headaches, neck aches, or toothaches?
8. Have you had a recent injury to your head, neck, or jaw?
9. Have you been aware of any recent changes in your bite?
10. Have you been previously treated for unexplained facial pain or a jaw joint problem?

From Okeson J, ed. Orofacial pain: guidelines for classification, assessment, and management. 3rd ed. Chicago, Ill: Quintessence Publishing, 1996. Reprinted with permission.

then be made. This can be accomplished by placing a millimeter ruler on the lower anterior teeth and asking the patient to open as wide as possible (Figure 7). The distance should be measured between the maxillary and mandibular anterior teeth. It is generally accepted that less than 40 mm is considered a restricted mouth opening.⁴

It is also helpful to inspect the teeth for significant

FIGURE 4

The masseter muscles are palpated bilaterally between the zygomatic process and the inferior border of the mandible. The patient is questioned for the presence of any pain or tenderness.



FIGURE 5

The temporalis muscles are palpated bilaterally above the zygomatic process while the patient is questioned for the presence of any pain or tenderness.



wear, mobility, or decay that may be related to the pain condition. The clinician should examine the buccal mucosa for ridging and the lateral aspect of the tongue for scalloping. These are often signs of clenching and bruxism. A general inspection for symmetry and alignment of the face, jaw, and dental arches may also be helpful. A summary of this screening examination is found in Table 3.

MANAGEMENT CONSIDERATIONS

As with any disorder, therapy should be based, in part, on the morbidity and mortality of the disorder. Understanding the natural course of TMD is therefore important for both the clinician and the patient. Most recent studies suggest that TM disorders are generally self-limiting and symptoms often fluctuate over time.^{20,21,50} Understanding this natural course does not mean these conditions should be ignored. Temporomandibular disorder can be a very painful condition leading to a significant decrease in the patient's quality of life. Understanding the natural course of TMD does suggest, however, that therapy may not need to be aggressive. In general, initial therapy should begin conservatively and only escalate when therapy fails to relieve the symptoms.

When the physician identifies a patient with a TM disorder, he or she has two options. The physician

FIGURE 6

The temporomandibular joints are palpated bilaterally over the preauricular areas while the patient is questioned for the presence of any pain or tenderness. The patient should be asked to repeatedly open and close the mouth, and any clicking or popping noises should be noted.



can elect to treat the patient or refer the patient to a dentist for further evaluation and treatment. The decision to refer the patient should be based on whether the patient needs care that can be provided only in a dental office. The following are some indications for referral to a dentist:

1. History of trauma to the face related to the onset of the pain condition
2. The presence of significant TMJ sounds during function
3. A feeling of jaw catching or locking during mouth opening
4. The report of a sudden change in the occlusal contacts of the teeth
5. The presence of significant occlusal instability
6. Significant findings related to the teeth (eg, tooth mobility, tooth sensitivity, tooth decay, tooth wear)
7. Significant pain in the jaws and masticatory muscles upon awaking
8. The presence of an orofacial pain condition that is aggravated by jaw function but significant uncertainty exists regarding the specific diagnosis.

It is particularly important to consider a referral if the pain condition has been present for more than

several months.

The specific therapy for a temporomandibular disorder varies according to the precise type of disorder identified. In other words, masticatory muscle pain is managed somewhat differently than intracapsular pain. Generally, however, the initial therapy for any type of TMD should be directed toward the relief of pain and the improvement of function. This initial conservative therapy can be divided into three general types: patient education, pharmacologic therapy, and physical therapy.

PATIENT EDUCATION

It is important that patients have an appreciation for the factors that may be associated with their disorder, as well as the natural course of the disorder. Patients should be reassured and, if necessary, convinced by appropriate tests that they are not suffering from a malignancy. Properly educated patients can contribute greatly to their own treatment. For example, knowing that emotional stress is an influencing factor in many TM disorders can help patients understand the reason for daily fluctuations

FIGURE 7

The maximum range of mouth opening should be measured. This is accomplished by placing a millimeter ruler on the lower anterior teeth and asking the patient to open to the maximum comfortable position. The distance between the upper and lower anterior teeth is measured. A distance of 40 mm or greater is considered normal. This patient can only open 30 mm, revealing a mild restriction in mouth opening.



TABLE 3

Recommended Screening Examination Procedures for Temporomandibular Disorders

1. Palpate for tenderness in the masseter and temporalis muscles
2. Palpate for preauricular (TMJ) tenderness
3. Measure range of mouth opening. (Note any incoordination in the movements)
4. Auscultate and palpate for TMJ sounds (ie, clicking or crepitus)
5. Note excessive occlusal wear, excessive tooth mobility, buccal mucosal ridging, or lateral tongue scalloping
6. Inspect symmetry and alignment of the face, jaws, and dental arches

Adapted, with permission, from Okeson J, ed. *Orofacial pain: guidelines for classification, assessment, and management*. 3rd ed. Chicago, Ill: Quintessence Publishing, 1996.

of pain intensity. Attention should be directed toward changing their response to stress or, when possible, reducing their exposure to stressful conditions. A well-informed patient will not only help with treatment but will likely experience less anxiety and stress regarding the condition. This establishes a better environment for recovery.

Patients with pain during chewing should be told to begin eating a softer diet, chew more slowly, and eat smaller bites. As a general rule the patient should be told "if it hurts, don't do it." Continued pain can contribute to the cycling of pain and should always be avoided. The patient should be instructed to let the jaw muscles relax, maintaining the teeth apart. This will discourage bruxing activities and minimize the load on the teeth and joints.

When pain is associated with a clicking TM joint, the patient should be informed of the biomechanics of the joint. This information often allows the patient to select functional activities that are less traumatic to the joint structures. For example, some patients may report that the pain and clicking are less when they chew on a particular side of the mouth. When this occurs, they should be encouraged to continue this type of chewing.

PHARMACOLOGIC THERAPY

Pharmacologic therapy can be an effective adjunct in managing symptoms associated with TM disorders. Patients should be aware that medication alone will not likely solve or cure the problem. Medication, however, in conjunction with appropriate physical therapy and definitive treatment does offer the most

complete approach to many problems. Mild analgesics are often helpful for many TM disorders. Control of pain is not only appreciated by the patient but also reduces the likelihood of other complicating pain disorders such as muscle co-contraction,²⁴ referred pain,²² and central sensitization.⁵¹

Nonsteroidal antiinflammatory drugs (NSAIDs) are helpful with many TM disorders. Included in this category are aspirin, acetaminophen, and ibuprofen. Ibuprofen is often effective in reducing musculoskeletal pains. A dosage of 600 to 800 mg three times a day commonly reduces pain and stops the cyclic effects of the deep pain input. There are numerous other NSAIDs, and if ibuprofen does not reduce the pain, another should be tried. Individual patients may respond differently to these medications. Continued use may result in stomach irritation, so the patient should be questioned for prior gastrointestinal problems before use and monitored closely during treatment. It is suggested that these medications be taken with meals.

When muscle pain is the chief complaint, it would seem logical to prescribe a muscle relaxant. Muscle relaxants, however, have not proved to be very useful in TMD. To significantly reduce masticatory muscle pain, the dosage of the muscle relaxant must often be increased to levels that will likely influence the patient's ability to carry out daily activities. The medication can therefore become more debilitating than the disorder itself. If, however, the patient complains of poor quality of sleep or routine awakenings with pain, a brief intervention with a compound such as cyclobenzaprine may be useful. A 10-mg dose before sleep can be helpful in reducing muscle activity and improving sleep quality. In this instance, most patients report no interference with daily activities since the medication will be sufficiently metabolized by morning. It is not recommended that this medication be used for more than 10 days.

PHYSICAL THERAPY

Many patients with TMD receive symptom relief with physical therapy methods. Simple instructions for the use of moist heat or cold or both can be helpful. Surface heat can be applied by laying a hot moist towel over the symptomatic area.⁵² A hot water bottle wrapped inside a towel will help maintain the heat. This combination should remain in place for 10 to 15 minutes, not to exceed 30 minutes. An electric heating pad may be used, but care should be taken not to leave it on the face too long. Patients should

be discouraged from using the heating pad while sleeping because overlong use is likely.

Like thermotherapy, coolant therapy can provide a simple and often effective method of reducing pain. Ice should be applied directly to the symptomatic joint or muscles and moved in a circular motion without pressure to the tissues. The patient will initially experience an uncomfortable feeling that will quickly turn into a burning sensation. Continued icing will result in a mild aching and then numbness.⁵³ When numbness begins, the ice should be removed. The ice should not be left on the tissues for longer than 5 to 7 minutes. After a period of warming, a second cold application may be desirable. It is thought that during rewarming there is an increase in blood flow to the tissues, assisting in tissue repair.

The clinician should suggest both heat and cold modalities to the patient since the results can vary according to the individual. The patient should determine the most effective modality for his or her pain. These modalities can be used as often as the patient desires.

Although restricting jaw movement can be helpful at first, limiting joint function for a significant period can lead to chronic mandibular hypomobility and muscle atrophy. As pain subsides, a few passive exercises, not exceeding the pain threshold, can be helpful to return the jaw to normal function. The patient should be instructed to gently open the mouth to resistance and close. The jaw should then be moved laterally. If these exercises produce pain, they should be discontinued until the pain is properly addressed.

The physician should be aware that many TM disorders respond to the use of orthopedic appliances (ie, occlusal appliances, bite guards, splints). These appliances are made by the dentist and are custom fabricated for each patient. There are several types of appliances available. Each is specific for the type of TM disorder present. The dentist should be consulted for this type of therapy.

OTHER THERAPEUTIC CONSIDERATIONS

Sometimes TM disorders can become chronic and, as with other chronic pain conditions, may then be best managed by a multidisciplinary approach. If the patient reports a long history of TMD complaints, the physician should consider referring the patient to a dentist associated with a team of therapists, such as a psychologist, physical therapist, and even a chron-

ic pain physician. Generally, patients with chronic TMD are not managed well by the simple initial therapies discussed in this article. Often other factors, such as mechanical conditions within the TM joints or psychologic factors, need to be addressed. The physician who attempts to manage these conditions in the private practice setting may become frustrated with the results. It is therefore recommended that if the patient's history suggests chronicity or if initial therapy fails to reduce the patient's symptoms, referral is indicated.

SUMMARY

Temporomandibular disorders are common in the general population. Many patients with TMD first report to their physician with these complaints. It is important that the physician be able to distinguish these complaints from other common sources of orofacial pain. Once TMD is recognized, the physician must decide either to treat the patient or refer for treatment. Managing acute musculoskeletal symptoms associated with TMD follow the same principles used to manage many other musculoskeletal complaints. When the physician feels comfortable with these issues and principles, he or she may wish to render the initial conservative therapy. In instances when the diagnosis is uncertain or chronicity is present, referral to a dentist for further evaluation of the masticatory structures is indicated. Failure of initial conservative therapy is also indication for referral.

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