Temporomandibular disorder (TMD) represents a multiplicity of conditions expressed in the temporomandibular joints, masticatory muscles, and associated structures. Many of these conditions share common signs and symptoms. Treatment of these conditions must be individualized to the specific subcategory of TMD in order to develop a case-specific plan of care.

In addition, etiologic variables and individual patient considerations must be addressed. Many studies have supported the need for a complete evaluation of each case from historical, clinical presentation and intra-oral and psychological perspectives must be accomplished. Treatment outcomes can be enhanced by understanding the etiology, identification of specific causative factors, and management strategies that address all the components involved.

The development of a diagnosis-specific plan with a prioritized problem list is necessary to enhance treatment outcomes. The primary goals of treatment of TMD are to reduce or eliminate pain; restore a more normal function; allow return to the activities of daily living; reduce long-term health care needs for the problem.

A multi-disciplinary model that includes patient education and self care, cognitive behavior therapy, physical therapy and orthopedic appliance therapy (intra-oral intervention, pharmaceutical therapy) drug intervention, psychological therapy, and patient education and self care and physical/psychological perspectives must be accomplished. Relief of symptoms is typical of a self-care program is to prevent further injury to the musculoskeletal system and to allow for a period of healing to take place. The success of self care depends on patient motivation, cooperation and compliance.2 Self-directed care typically includes limitation of mandibular function, habit awareness and modification, a home exercise program and physical therapy. Promoting rest for the injured tissues promotes healing. Voluntary reduction of mandibular function, maintaining a soft diet, avoidance of foods that require a great deal of chewing, opening wide, yawning or other activities that promote excessive mandibular function should be avoided.

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Botox injection is a tool that is used in the treatment of TMD due to its potential anti-inflammatory effects. The main advantage of using Botox injection is that it can provide temporary relief from symptoms of TMD. However, it is important to note that Botox injection is not a cure for TMD and it should be considered as an adjunctive treatment to other forms of therapy.

Medication therapy for TMD often involves the use of non-steroidal anti-inflammatory drugs (NSAIDs), antidepressants, and anxiolytics. NSAIDs are commonly used to relieve pain and inflammation, while antidepressants and anxiolytics are used to manage the associated emotional and psychological symptoms of TMD.

Surgical intervention may be considered for patients who have failed to respond to conservative treatment, or in cases where there is a significant limitation of mandibular function. Surgical options include open and closed fascial releases, arthroscopy, and arthrodectomy. These procedures are usually performed under general anesthesia and recovery is typically uncomplicated. The success of surgical intervention depends on the severity of the condition and the patient's overall health.

Alternative therapies such as acupuncture, biofeedback, and relaxation techniques may also be used to manage the symptoms of TMD. These therapies are generally considered safe and may be used in conjunction with conventional treatment.

In conclusion, the treatment of TMD is multifactorial and requires a comprehensive approach that addresses both the physical and psychological aspects of the condition. Early intervention and a multidisciplinary approach are essential to achieving successful outcomes for patients with TMD.
or due to their action as a sedative, they play an important role in the treatment of TMD. Primary indications are for muscle spasm, acute muscle pain to help prevent the increased muscle activity associated with TMD.

Fleurtil (cyclobenzaprine hydrochloride), which is similar chemically to tricyclic antidepressants, is the drug of choice for generalized chronic muscle pain. Fleurtil has been shown to provide significant relief of muscle pain, and enhance the quality and quantity of sleep. Its combination with an NSAID can be a very effective tool in the treatment of acute TMD. Flexeril is also used as a muscle relaxant. A list of commonly used muscle relaxants is shown in Table 4.

Antidepressants
These medications are helpful with chronic diffuse pain due to myofascial pain, especially when it has been recognized that sleep disturbance is a contributing factor. The analgesic properties of the tricyclic antidepressants are independent of the antidepressant effect. They have shown pain modification properties at therapeutic dosages much lower than those prescribed for antidepressant effect.

The therapeutic effect of the drugs is thought to be related to their ability to increase the availability of the neurotransmitters serotonin and norepinephrine at the synaptic junction in the central nervous system. Studies have demonstrated their use also in the treatment of sleep related bruxism, tension type headache, migraine headache prophylaxis, fibromyalgia and various neuropathic conditions.21,22

Side effects are mainly related to the anticholinergic activity that induces xerostomia, constipation, dry mouth and increased each week only if needed and tolerated by the patient. Table 5 shows a list of some of the most commonly utilized drugs in this class.

Opioids
Typical indications for opioids in the TMD population include exacerbation of pain, postoperatively and in cases of overt trauma. These medications are best indicated for moderate to severe pain over a short period of time. Most common side effects are nausea, respiratory depression and physical dependence. Opioids may be considered in cases of pain refractory for appropriately integrated multidisciplinary care when properly monitored.

Local Anesthetics
Local anesthetics can be useful in the TMD population as a diagnostic tool and also in selective cases as a therapeutic modality.
ally, TMD may be related to an
swollen tissues. Acupuncture
the medication into the tender or
on the TMJ is the most common form of
of the masticatory system.
considered. The participation and
Transcutaneous electrical nerve
or less often because repositioning
peractivity, increase tissue dis-
ulation, life style counseling, pro-
tors will likely compromise the
nation of muscle function is
crease range of motion. Coordi-
cises designed to achieve a differ-
cost. It has been suggested to be as ef-
factors are involved in the treatment of TMD.
Surgical intervention in-
ultural course of Osteoarthrosis as it
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2. Check the CME program.
3. Fill in the Questionnaire
4. Submit the answers via fax or email.
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Chapter 2

The TMJ patient’s cognitive, emotional and behavioral re-
sponse to pain are key issues in the management of the condi-
tion. The patient’s perception to pain may be maladaptive in the
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Behavioral/psychotherapy

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Cognitive-behavioral strate-
gies for pain management in oral
 frivolity or tooth contacts.
The major functions of non-
directive, flat plane appliance
therapy are muscle relaxation,
and objective. Indications for
which level of pain can be
controlled.

repetitive use of the appliance.

The indications for TMJ surgery are
for the treatment of TMD and associ-
ated myofascial pain are scarce.

In order to derive a subjective and
objective measure of the
improvement in quality of life
and function, a clinical

In summary, the use of TMD
self-help may be associated
with positive outcomes in
the treatment of TMD.

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