Management of Patients with TMDs:  
A New “Standard of Care”

The field of temporomandibular disorders (TMDs) is well-known for being one of the more controversial topics in the field of dentistry. Literature produced during the past 25-30 years has been pointing the profession in the direction of a medically-based model for diagnosis and treatment. In addition, it has become widely accepted that these types of pain patients must be managed within a biopsychosocial framework, in which conservative medical care is supplemented by behavioral approaches. Finally, it has become clear that a minority segment of TMD patients will prove resistant to therapy and become chronic pain patients; as a result, much research focus has been directed at unraveling the complexities of such outcomes.

These conclusions are widely accepted in the clinical research community, but arguments persist within the practitioner community, leading to an unacceptable gap between science and practice in many instances. Obviously, the main victims of this situation are the TMD patients themselves, because their fate is largely determined by who they consult about their problems. In an attempt to provide some guidance for proper conduct in this arena, various practitioner groups have attempted to develop and present guidelines for diagnosis and treatment of TMD disorders. However, even the most widely recognized guideline reference, published by the American Academy of Orofacial Pain (AAOP), ends up being criticized for being parochial or political. In some countries, the dental establishment has produced guidelines for practitioners who treat TMD and orofacial pain patients, but unfortunately the United States is not one of those.

A first attempt to fill in this void in the USA was made in 1996, when the American Association of Dental Research (AADR) approved a Science Information Statement about diagnosis and treatment of TMDs. This relatively weak Statement did not have much impact, so over the past several years a committee from the Neuroscience Group of AADR has been working on improving and updating the original Statement. As of March 3, 2010, the AADR Council gave its final approval to the revised statement, which is reproduced below. This revision is based on a careful review of the literature on diagnostic modalities and treatment approaches, and was vetted through all levels of the Neuroscience Group, Science Information Committee, AADR Board, and finally the AADR Council; this process took almost 3 years.

Therefore, the publication of this new TMD Statement should be regarded as the closest thing to date to a true Standard of Care in this contentious field. It is presented here for readers to look at and incorporate it into their clinical practices. To the extent that this does occur, future TMD patients will be at lower risk for inappropriate treatment, and thus at higher probability of getting the kinds of professional care they actually need.
The AADR recognizes that temporomandibular disorders (TMDs) encompass a group of musculoskeletal and neuromuscular conditions that involve the temporomandibular joints (TMJs), the masticatory muscles, and all associated tissues. The signs and symptoms associated with these disorders are diverse, and may include difficulties with chewing, speaking, and other orofacial functions. They also are frequently associated with acute or persistent pain, and the patients often suffer from other painful disorders (comorbidities). The chronic forms of TMD pain may lead to absence from or impairment of work or social interactions, resulting in an overall reduction in the quality of life.

Based on the evidence from clinical trials as well as experimental and epidemiologic studies:

1) It is recommended that the differential diagnosis of TMDs or related orofacial pain conditions should be based primarily on information obtained from the patient's history, clinical examination, and when indicated TMJ radiology or other imaging procedures. The choice of adjunctive diagnostic procedures should be based upon published, peer-reviewed data showing diagnostic efficacy and safety. However, the consensus of recent scientific literature about currently available technological diagnostic devices for TMDs is that, except for various imaging modalities, none of them shows the sensitivity and specificity required to separate normal subjects from TMD patients or to distinguish among TMD subgroups. Currently, standard medical diagnostic or laboratory tests that are used for evaluating similar orthopedic, rheumatological and neurological disorders may also be utilized when indicated with TMD patients. In addition, various standardized and validated psychometric tests may be used to assess the psychosocial dimensions of each patient's TMD problem.

2) It is strongly recommended that, unless there are specific and justifiable indications to the contrary, treatment of TMD patients initially should be based on the use of conservative, reversible and evidence-based therapeutic modalities. Studies of the natural history of many TMDs suggest that they tend to improve or resolve over time. While no specific therapies have been proven to be uniformly effective, many of the conservative modalities have proven to be at least as effective in providing symptomatic relief as most forms of invasive treatment. Because those modalities do not produce irreversible changes, they present much less risk of producing harm. Professional treatment should be augmented with a home care program, in which patients are taught about their disorder and how to manage their symptoms.
References


