

On Emphasizing a Scientifically Prudent Approach to the Management of Temporomandibular Disorders

The focus of this issue of the *Journal of Orofacial Pain* is temporomandibular disorders (TMD). It features review papers that were presented at the Mini-Symposium on Temporomandibular Joint and Masticatory Muscle Disorders, held earlier this year at the University of Toronto's Faculty of Dentistry. This synthesis of the presented material seeks to provide both dentists and residents-in-training with entry-level information about those temporomandibular joint (TMJ) and masticatory muscle disorders which impact upon their professional lives.

It has often been stated that a catalog of life's certainties invariably includes taxes and death. A more realistic list would also include musculoskeletal disorders.¹ In fact, numerous anecdotal reports suggest that a significant number of all adults will experience some sort of musculoskeletal disorder in their lifetime. These disorders are a leading reason for visits to health care providers and work disability. While these disorders comprise one of society's most bothersome non-lethal conditions, they are not readily defined by clinical findings from rigorously controlled studies. Temporomandibular disorders are the one small group of these many-reported musculoskeletal disorders of particular relevance to the dental profession. They too are characterized by weak evidence, such as anatomic or physiologic inferences and case reports, and do not appear to be a major cause for visits to the dentist. In fact their presumed importance as a health risk requiring comprehensive intervention and rivaling caries and periodontal disease has never been substantiated, in spite of assertions that so-called dysfunctions of the masticatory system are common.²

Like other joints in the body, the TMJs are vulnerable to both extrinsic and intrinsic influences, as well as time-dependent changes. This vulnerability may express itself as intermittent or continuous pain in various parts of the head and neck. It may also be accompanied by alterations in mandibular movement and various joint sounds. Given the dental profession's logical concern with

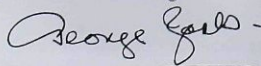
the status and relationship of patients' dentitions, it has been tempting for dentists to treat what they see and see what they treat whenever jaw-joint pain is encountered. Hence the understandable if prolonged lapse into attributing causal relationships, even in the absence of scientific evidence. Regrettably, the unqualified relationship of pain and malocclusion still holds sway in dental practice, and many unproven occlusal therapies have been enthusiastically introduced and propagated. This predicament has continued despite a lack of scientific evidence linking most face and head pains to occlusal disturbances.

As clinical educators we have sought to articulate a case for scientific discretion in dealing with pain and dysfunction of the TMJ and associated muscles, with an impressive and evolving scientific focus providing much valuable information. Gender, age, culture, morphology, and emotional makeup have already been shown to impact upon patients' pain responses. A better understanding of the neurophysiologic and behavioral processes involved in pain development and progression has emerged, and eclectic and scientifically rational diagnostic approaches, plus patient management strategies, can now be proposed as new hypotheses are tested. The need for outcome studies of treatment efficacy and effectiveness has finally been recognized, albeit somewhat belatedly. Several of the presenters at our mini-symposium had already contributed significantly to the articulation of these views; see, for example, *Temporomandibular Joint and Masticatory Muscle Disorders*, which was edited by George Zarb, Gunnar Carlsson, Barry Sessle, and Norman Mohl and published by Munksgaard in 1994. A reiteration of these convictions seemed necessary to ensure a sustained pursuit of prudent and low-tech management of such disorders.

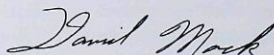
"Temporomandibular disorders" may be regarded as a collective term that embraces a number of clinical problems that involve the masticatory musculature, the TMJ, or both. These disorders have been identified as a major cause of

non-dental pain in the orofacial region and are now considered to be a subclassification of musculoskeletal disorders. Patients frequently expect virtual panaceas for their dental health problems, and the dental profession has inadvertently embraced (or even nurtured) the perception that TMJ and masticatory muscle disorders are similar to dental ones. However, it now appears that we are dealing with variations on the theme of musculoskeletal disorders, the majority of which can be managed, rather than cured. Often the accompanying symptoms of these disorders may be regarded as a form of "background noise" that patients have to be guided and counseled into trying to ignore or else accept. For example, some researchers' surveys demonstrate that some people may have frequent symptoms, such as upset stomach, headache, back pain, fatigue, and so on, and a typical adult may average 1 day of symptoms in every 4. The good news is that most musculoskeletal disorders, especially TMD, will subside even when their pain is initially perceived or reported as severe. The prognosis seems to hold true irrespective of the treatment method or management strategy employed, even if the latter means no treatment at all beyond explanation and advice.

Sober and sensibly argued texts and symposia in this field are obviously needed; hence these proceedings, which seek to de-emphasize unproven hypotheses and whenever possible to reconcile scientific evidence with common sense and intellectual honesty with clinical prudence. With the help of our contributors, we have tried as co-editors to provide valuable insights and directions for our clinical and research colleagues in this fascinating area.



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