EDITORIAL

TMD: Taxonomic mix-up beyond description

The term *temporomandibular disorder* (TMD) was originally introduced to resolve a quandary that developed from the history of how the dentistry profession classified disorders of the temporomandibular joint (TMJ) and muscles of mastication. TMD is essentially an umbrella classification that covers disorders of these entities. The confusion began when TMD was applied as a diagnosis—this is about as helpful as diagnosing all patients with migraine, tension headache, cervicogenic headache, or cluster under a general headache category. The implications of proper terminology, criteria, classification, and subsequent diagnosis are clear. They provide a common language not only for healthcare professionals to communicate and publish, but also to provide the basis for tailored, individualized treatment.

TMD includes disc displacements, degenerative joint disease, and masticatory myofascial pain. Each has an individual pathophysiology, natural course, and specific treatment modalities. So why do we continue to use the term *TMD*? There is so much data in the literature that has grouped these ailments, we retained the term to be able to use the vast epidemiologic data at our disposal. But why use TMD as a diagnosis? In my view, it stems from a basic misconception of the pathophysiology of these disorders.

Our conceptual problems begin with Costen's first description of this entity (1934) and its emphasis on tooth loss as a major etiological factor. This established that regional musculoskeletal pain and dysfunction were invariably associated with anatomical factors such as the dental occlusion or the TMJ, a misconception that proved difficult to change. It was not until the 1950s and 1960s that the muscles of mastication received attention as possible sources of pain.[1,2] The historical development of etiologic theories explains much of the continuing confusion.[3] In the 1980s, the definition of internal derangements (ID) of the TMJ conceptually separated the joint from muscle myofascial pain (MMP) and catalyzed modern classifications of joint- and muscle-related disorders.[4]

In spite of these changes, the dental profession's understanding of musculoskeletal problems has continued to distance itself from sound orthopedic and muscle pain principles, largely due to these early, mechanistic etiologic theories. As a result, there has been a separation of masticatory MMP from other chronic regional pain syndromes such as tension-type headaches (TTH). In this context, it is timely and pertinent to ask whether MMP is an expression of central mechanisms rather than a primary muscle disorder.[5]

In general, early theories of regional musculoskeletal pain were similar in that they offered one-cause-one-disease hypotheses. However, the continued lack of evidence for these unicausal theories led to the proposition of new theories combining stress and occlusal disharmonies and later multifactorial and biopsychosocial theories.

So how do we extract ourselves from this taxonomic mix-up beyond description? We must accept that the historical data that combined TMJ and muscle disorders as one is unusable; this is a painful process as there is a vast amount of data that needs to be eliminated. Journals must insist that articles submitted on aspects of TMD separate the diagnosis and analysis of muscle and joint disorders and reject the concept that TMD itself is a diagnosis or clear clinical entity. We need to establish an alternative terminology to facilitate this process. We must begin to think outside the box, particularly concerning myofascial pain.

My own feeling is that we must also work more closely with our medical colleagues and integrate our classification with that in the headache field, particularly in the field of myofascial pain, which has so many similarities to tension-type headache.[6] As such, I believe we should integrate methodologies such as the total tenderness score into our assessment of MMP patients.[7,8]

The time for change has come, but we insist on ignoring it; the more we hesitate, the more severe the consequences for our patients and ourselves.

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