Temporomandibular disorders

Part 1: Epidemiologic and etiologic considerations

Editor's note: Following is the continuation of an article that appeared in the March 17-23 issue of Dental Tribune. Part 2 in this series also begins on this page. Part 3 will appear in next edition.

Basic assessment of all TMD patients should include behavioral and psychological screening by the dentist during the history taking process. The history should include questions to evaluate behavioral, social, emotional, and cognitive factors that may initiate, sustain or result from the patient's condition. Consideration to relevant factors such as oral habits, signs of depression, anxiety, stressful life events, lifestyle, secondary gain, and overuse of health care should also be given. Imaging of the TM joint and orofacial structures may be necessary to rule out structural disorders, and must be prescribed primarily when the clinical examination suggests some form of disorder.41

Heretofore clinical practice in the area of TMD has been based on anecdotal reporting. Individual and group interpretation of the limited scientific evidence has led to a marked variation in the philosophy of practice in this complex area. Empiricism and rationalism has at times resulted in disregard for the valid scientific evidence-base that does exist. With the explosion of knowledge regarding pain mechanisms and pathways, the effect of pain on quality of life, and an enhanced appreciation for the multifactorial nature of TMD, today's dentist can better apply science to the art of practicing evidence-based dentistry. Evidence-based dentistry is the conscientious, explicit and judicious use of best evidence in making decisions about the care of each patient. "The purpose of using the evidence-based approach is to close the gap between what is known and what is practiced and to improve patient care based upon informed decision making." Albert Einstein said, "Science without religion is lame, religion without science is blind."

Part 2: Diagnostic classification

The head, face, masticatory system, and cervical region are common sites in which pain is experienced. Many conditions present with similar signs and characteristic patterns that may lead to diagnostic confusion and ultimately misdirected care. Defined, validated classification systems relating to the multiplicity of painful entities can simplify and enhance diagnostic outcomes. Due to the rapid advances in our knowledge regarding pain mechanisms and pathways, classification systems must be ever evolving, not rigid. Presently an ideal system related to masticatory system disorders does not exist. One set of diagnostic criteria will not satisfy all circumstances to which it might be applied. More importantly, many classifications systems were developed for the purpose of enhancing the formation of study populations for clinical research endeavours and are not absolutely applicable to every clinical case presentation.

For example, the inclusion criteria for a clinical trial might require the presence of all criteria for a specific disease, while a clinical diagnosis might require the presence of only a few. These criteria are meant only to provide clinical guidance for diagnosis. Final diagnostic decisions must be based on the clinical judgment of the health care professional.

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Part 3:

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