

Vive La Différence

Two very different but extremely important meetings involving TMD were held this spring. The first meeting, the National Institutes of Health Technology Assessment Conference, was convened at the end of April by the National Institute of Dental Research, the NIH Office of the Medical Applications of Research, and various other National Institutes of Health, including the NIH Office of Research on Women's Health. Twenty-three experts in TMD and related areas from the United States, Canada, and Europe, with varied backgrounds and training in medicine, dentistry, and/or research, were invited as speakers. They presented information to a 15-member panel composed of academicians, clinicians, and insurance administrators from the fields of medicine, dentistry, behavioral medicine, and bioengineering. The speakers presented reviews of the scientific literature, their own research data, and clinical observations and findings in pain management, cellular biology, epidemiology, behavioral and social sciences, tissue engineering, and clinical dentistry and medicine.

The conference was convened because of concerns of safety and efficacy of the diagnostic and treatment approaches that are currently being used for more than the estimated 10 million Americans afflicted with TMD. The planning committee was chaired by John H. Fergusson, MD, Director of the Office of Medical Applications and Research, NIH, and James A. Lipton, DDS, PhD, Special Assistant for Training and Career Development, NIDR. The more than 1,400 registrants consisted of primarily dentists but also included patients, patient advocates, and other interested parties from the public sector. The conference attempted to focus on the rationale for, and outcomes of, a variety of treatments currently used in practice, such as behavioral therapy, pharmacotherapy, physical therapy, orthotics, occlusal therapy including orthodontics, and surgical management.

After 2 days of presentations, discussions, and study of the current literature, the panel concluded that, "Consensus has not been developed across the practicing community regarding many issues, including which TMD problems should be treated and when and how they should be treated," and that "diagnosis often depends on the practitioner's experience and philosophy rather than on scientific evidence." Nonetheless, there was consensus that the initiation of treatment should be based on patient history and physical examination, including laboratory

analyses, imaging, and psychosocial evaluation. The panel stated, "The preponderance of the data does not support the superiority of any method over another for initial management of most TMD problems," and that "irreversible treatments, including surgical procedures, should be used only with a small percentage of patients." They found insufficient evidence for the prophylactic management of TMD, including occlusal adjustment. They also stated that for the patient with episodic signs and symptoms, a noninvasive, stepwise conservative approach should be implemented; for the patient with persistent, non-remitting signs and symptoms, an evidence-based, patient-centered care approach should be implemented with psychologic treatment strategies, when indicated, tailored to the individual needs of chronic patients. The panel emphasized the need for randomized, controlled clinical trials accompanied by measures of clinical outcomes and cost-effectiveness to determine the efficacy of TMD treatments.¹

The most interesting and revealing part of the conference was the discussion periods, during which a great deal of frustration and disagreement was expressed by the audience. During these sessions, it became clear that many clinicians and many patients or patient advocates were upset that structural treatment of either the occlusion or even the TM joints was not adequately addressed. Many clinicians and their patients are still totally convinced that the primary, if not the only, cause of TMD is an occlusal and/or jaw relationship discrepancy or misalignment. It was also clear that many clinicians still believe that years of experience and observations provide enough data to establish cause and effect relationships.

It was interesting to observe the diametrically opposed occlusion-based interest groups make statements from the floor. They all enthusiastically applauded each other's statements regarding structural improvements, which, according to most of the clinicians, provided 100% success. Yet, the quite disparate occlusal treatment approaches professed by the various groups yield very different structural relationships with treatment and ones that are usually considered potentially "pathologic" or "traumatic" by the other stereotyped occlusal groups. It is understandable that patients are psychologically more comfortable, and thus, support the belief that a structural imperfection is the cause of their pain or dysfunction rather than some other factor that might require personal insight and behavioral change.

Herein lies a major communication breakdown between academicians and clinicians, or what has been inappropriately termed the so-called "occlusionists" versus "nonocclusionists." Just because the answers are not readily available regarding cause and effect between occlusion and TMD does not mean that associations do not exist. Indeed, Seligman, Pullinger, McNamara, Okeson, and others have reported that certain associations may exist.²⁻⁴ Many clinicians include dental conditions proven to be related to occlusal factors as TMD problems. Clearly, tooth sensitivity, an uncomfortable bite, abnormal tooth mobility, increased PDL width, fremitus, and other conditions can be related to occlusal factors, especially following abrupt and nonconforming occlusal changes. These dental conditions have specific diagnostic criteria and should not be grouped into a single generalized patient problem or syndrome, nor should they be confused with TMD classification subsets, which have their own specific diagnostic criteria. Further, for those clinicians or academicians interested in occlusion, the horizons are greater than ever before, especially with the rapid growth in the placement of dental implants. Those dentists replacing, moving, or repairing teeth or their analogs need to be as concerned with the treatment of occlusion as much as, or more than, ever.

The second meeting was also extremely important, with less frustration and anger expressed by the audience. The Second International Congress on Orofacial Pain and Temporomandibular Disorders was hosted by the European Academy of Craniomandibular Disorders in May. More than 700 members and guests from all five of the sister academies met in Paris to hear presentations on the central and peripheral processing of muscle and joint pain and central mechanisms of orofacial activity, connective tissue healing, biomechanics, and the clinical management of TMD. The speakers openly presented great insight into what is known and what is not known in the field of TMD. The chairman of the extremely successful Congress was Dr Patrick Simonet of France, president of the European Academy, and the program chairman was Antoon De Laat of Belgium, a member of the European Academy of Craniomandibular Disorders. The Asian, Australian, and Ibero-Latin American Academies of Craniomandibular Disorders were ably represented by their presidents, Drs Maruyama, Wilkinson, and Jimenez, respectively, as was the American Academy of Orofacial Pain, represented by its president, Dr Gary Beeler.

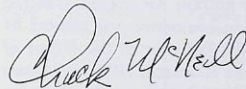
There was universal enthusiasm from the members of all five academies for the need for future controlled clinical trials and evidence-based treatment.

There seemed to be a genuine, collective agreement regarding the need for standardized terminology and approach to the assessment and management of TMD based on scientific evidence and centered on the needs of the patient. The discussion periods were filled with constructive criticisms and remarks. The collective desire for clinical practice to be based on a scientific foundation and for the need to establish cause and effect relationships and treatment outcome assessments was pervasive. Even though clinicians and academicians energetically discussed the issues with differences of opinion, there were common goals and agreements. The meeting was a testimonial to the hard work, high energy, enthusiasm, and dedication of all five academies, their leaders and committees, the program and meeting chairs and their committees, and the participating audience.

Unfortunately, there still are those few who feel that science is not essential and that clinical observations are enough, and they continually express contempt toward academicians. And to be sure, there are some academicians who have contempt for clinicians. Even though the two serve significant yet different roles, each is critically important to the other to answer clinically relevant questions, to predict patient outcomes, and to solve patient problems. We all need each other. I hope we start to realize this critical necessity sooner rather than later for our patients' sake.

"I don't quite hear what you say, but I beg to differ entirely with you."

—Augustus De Morgan, Cambridge



Charles McNeill, DDS
Editorial Chairman

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