Temporomandibular joint disorders



The term temporomandibular joint disorders (TMDs) are used to describe a wide range of symptoms manifested by disruption of normal temporomandibular joint function. Although the term is used to refer to a disease process, technically TMD is not a disease entity, rather a range of manifestations of altered structure and/or performance of articular and/or periarticular tissues that may arise from a variety of causes.

Although there have been excellent attempts to classify the TMDs such as the Research Diagnostic Criteria for TMDs and the Wilkes staging for TMDs. The present classification schemes proceed to grade the severity of the symptoms experienced by the patient based on the clinical symptoms and radiologic findings, but little effort is invested in ascertaining the root cause. As such, although sophisticated imaging system is currently routinely being used (cone beam computed tomography and magnetic resonance imaging) at best to evaluate the stage of TMDs, there are no definitive guidelines to accurately ascertain the etiology of TMDs. Often times, this leads to misdiagnosis and consequent inadequate management.

The cause of TMD can be one among a staggering array of abnormalities ranging from commonplace factors such as parafunctional habits or trauma to exceedingly rare pathologies such as synovial chondromatosis and the incredible complexity of this tiny joint is readily appreciable when one contemplates the multitude of factors that can lead to its malfunctioning. Thus, a thorough understanding of its disease processes demands the involvement of other disciplines such as orthopedics, rheumatology, medicine, physiotherapy, and psychiatry among others in the form of joint involvement as a dedicated multidisciplinary team and not just through a referral system.

Another important aspect of diagnosis that is not stressed upon enough is the psychological aspect of this

disease. TMDs are more prevalent in females and among the younger group. The exact cause of this, although unknown, is probably linked to the higher amount of psychological stress experiencing in day-to-day life. It is well known that busy and stressful life may contribute in the form of psychological component. As such, the involvement of a psychiatrist is essential from the very beginning during the diagnosis as well as in the treatment phase so as to properly address the physical and psychological aspects of the disease. In the absence of such an approach, there is a high possibility of failure of treatment causing further deterioration of the psychological profile and quality of life of the patient.

The aim of treatment should be to achieve pain relief and restore jaw function. To achieve this goal, various therapeutic options of treatments are ranging from conservative treatment as reversible and noninvasive medicinal therapy as analgesics, muscle relaxants, tricyclic antidepressants, and antidepressants as serotonin-norepinephrine reuptake inhibitor and repositioning appliances. Minimal invasive and invasive procedures included arthrocentesis, arthrocentesis plus intra-articular injection hyaluronic acid, arthroscopy, disc repositioning, and discectomy. None of the treatment provides complete relief to the patients and sometimes may require additional therapy. However, in the absence of identification of the root cause of the TMD, therapy mostly ends up being palliative and in some instances may end up without much success.

Thus, it is the need of the hour to develop a comprehensive classification scheme incorporating an algorithmic decision-making protocol and the involvement of a dedicated multidisciplinary team with a thorough understanding of the complex pathophysiology of TMD. This will enable us to effectively streamline our clinical and research machinery in tackling the problem

and provide a more evidence-based treatment to our patients.

Rakesh Kumar Singh

Department of Oral and Maxillofacial Surgery, Faculty of Dental Sciences, King George's Medical University, Lucknow, Uttar Pradesh, India. E-mail: rksingh@kgmcindia.edu This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

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