Brief communication

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A brief comment about terminology and diagnostic standards in temporomandibular disorders

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Abstract

Temporomandibular disorder (TMD) is a common musculoskeletal condition. Changes in diagnostic criteria followed the relevant changes in the understanding of the etiology of TMD. The Diagnostic Criteria for Temporomandibular Disorders (DC/TMD) is a suite of validated instruments and guidelines for the most accurate and reliable diagnosis of various TMD-associated pathologies. This text reviews the leading DC/TMD questionnaire options, in either symptom checklists or psychosocial/functional sections.

Keywords: Temporomandibular joint disorders; TMJ disorders; Diagnosis; Diagnoses and Examinations

Temporomandibular disorder (TMD), a musculoskeletal subpart of orofacial pain conditions, has a recent history full of actions for the organization and standardization of diagnoses and terminologies. Previously called "craniomandibular disorders, orofacial disorders, facial misalignment," etc., the current TMD field has benefited from the efforts of an academic consortium dedicated to the topic, which remains under constant review and improvement–International Network for Orofacial Pain and Related Disorders Methodology or INfORM (https://ubwp.buffalo.edu/rdc-tmdinternational/). In the 1990s, INfORM developed the Research Diagnostic Criteria for Temporomandibular Disorders (RDC/TMD), which foreshadowed the current Diagnostic Criteria for Temporomandibular Disorders (DC/TMD) for the Diagnosis of Temporomandibular Disorders: Clinical Protocol and Assessment Tools [1].

Changes in diagnostic criteria followed the relevant changes in the understanding of the etiology of TMD, which went from a single causal biomechanical factor, whether related to dental occlusion or an intrinsic or extrinsic anatomical relationship of the temporomandibular joints, to broad neurological, psychological, systemic, and social factors [2,3]. Nevertheless, the diagnostic classification still carries an anatomical or anatomical–functional feature. Previously, the separation into "muscular" and "articular" TMDs prevailed –which remains in the specialty's mindset. However, the new guidelines emphasize the presence or absence of pain in a more clinical context. Essentially, the new DC/TMD incorporates information or criteria relevant to office practice despite lacking the best investigation or validation. The guiding axes of the diagnosis were maintained, being axis I, the "physical", with a direct approach to the pathology by its signs and symptoms detected in clinical examinations of palpation or observation of functional movements, and axis II, the "psychosocial", with validated instruments for the summary detection of relevant psychological or sociodemographic changes. Furthermore, due to technical and scientific evolution and the need to identify as soon as possible complex patients prone to chronic pain or dysfunction, predicting higher difficulties in treatment, some authors have proposed the addition of new domains for diagnosis. Engagement in future research would enable the construction of new biological axes "III" (with information obtained from research in genetics, and epigenetics) and even a purported axis IV (so-called neurobiological, identifying neuronal plasticity involved in pain formation through neuroscience diagnostic resources, also the approach of correlated pathways, such as learning and memory) [4].

In brief, the current DC/TMD is a suite of validated instruments and guidelines for the most accurate and reliable diagnosis of various TMD-associated pathologies. It includes anamnesis, physical tests, and laboratory and imaging examinations–these last if needed. Although widely respected and recognized, which makes it mandatory information for professionals in the field, the resource is complex and extensive; it is entirely challenging to implement in clinical routine or epide-

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miological research. As a solution, more concise and straightforward validated questionnaires are available for a preliminary diagnosis of the presence or absence of TMD without further specification of the pathology. For example, the DC/TMD offers the "TMD Pain screener," using only three preliminary items to assess the pain felt in the last 30 days [5]. It precedes the more comprehensive Symptom Questionnaire, the "DC/TMD Symptom Questionnaire," in the same document, encompassing the domains of Pain; Headache; Jaw Joint Noises, Closed Locking of the Jaw, and Open Locking of the Jaw. In its Axis II (the section which addresses psychosocial factors and pain-related disability), the DC/TMD diagnostic suite offers functional questionnaires dedicated to registering the level of functional impairment caused by TMD. An example is the "Jaw Functional Limitation Scale," in a version of 8 or 20 items [6].

The relevance of anamnesis, here compiled and reformulated as a questionnaire, is highlighted, without which any consideration of diagnosis is insufficient or even weak, as is often seen in studies conducted solely with imaging resources, sparse reports, or isolated biomechanical findings.

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