Orofacial Pain Mechanisms and Classification: Closely Allied Considerations

This issue of the Journal of Orofacial Pain represents the first in which the journal has published focus articles and associated critical commentaries and authors' responses. Indeed, there are 2 series of such papers in this issue. The intent of a focus article is for invited authors to provide a reasoned and referenced position or hypothesis on a basic science or clinical subject pertinent to orofacial pain and related conditions. The critical commentaries that accompany a focus article provide a mechanism for invited critiques to address points raised in the article, indicate its strengths and weaknesses, and possibly offer alternate views. The authors' response affords an opportunity for the authors of the focus article to respond to the critiques.

In the first focus article in this issue, Drs Ren and Dubner outline their concept of how injury to peripheral tissues or nerves can lead to prolonged neuroplastic changes in central nociceptive pathways that contribute to enhanced and persistent pain sensitivity. These changes are thought to reflect a so-called "central sensitization," which involves increased and prolonged excitability of central nociceptive neurons. Ren and Dubner propose a number of neurochemical events that may underlie these changes in excitability as well as potential contributions from altered central inhibitory processes. The critical commentaries by Drs Dionne, Hu, and Widmer endorse Ren and Dubner's model and the clinical implications of central neuroplasticity in the diagnosis and management of persistent pain. In general, they also agree with most of the proposed neural underpinning of the concept, although some aspects are disputed. A particularly important message from this article is that the pain pathways are not hard-wired but are indeed plastic and able to be modified by events in peripheral tissues and by the central neural changes induced by nociceptive afferent input into the central nervous system. Ren and Dubner make the point that these peripheral and central changes represent the normal protective function of these mechanisms, but that if the function goes awry and the changes persist even after the peripheral injury has dissipated, persistent pain may be established that is difficult to diagnose and manage effectively.

The diagnosis, management, and other clinical features of certain persistent pain conditions in the orofacial region are the topic of the second focus article by Drs Woda and Pionchon. The focus article proposes a unified concept for considering a group of pain conditions that they collectively refer to as "idiopathic orofacial pain." Woda and Pionchon note that the purpose of their article is to stimulate thinking on and discussion of the basis for the current classification of conditions commonly known by such terms as "atypical facial pain," "atypical odontalgia," "stomatodynia" or "burning mouth syndrome," and "temporomandibular disorders." Their article draws attention to many common or shared features of these pain conditions and outlines diagnostic criteria that may nonetheless allow them to be categorized more accurately. The critical commentaries by Drs Fricton, Okeson, and van der Waal acknowledge the problem of current classification schemes and do not appear to be at odds with Woda and Pionchon's proposition that the treatment of these pain conditions should be based mainly on etiologic and pathophysiologic diagnosis. They do nonetheless take issue with some features of the concept, including the utility of the proposed approach and the pros and cons to clinical practice of grouping some or all of these conditions together.

It is in the domain of etiology and mechanisms and their clinical correlates that the two series of focus articles, critical commentaries, and authors' responses converge, since it is likely that several of the peripheral and/or central neuroplastic changes described by Ren and Dubner in their focus article may contribute to some or all of the persistent pain conditions outlined in the Woda and Pionchon focus article. The two series of papers collectively reveal particular challenges that still exist, namely the need to discover and understand the etiologic and pathophysiologic processes that underlie these conditions so as to provide an improved basis for clinical approaches that may assist in their diagnosis and management.

Barry J. Sessle Editor-in-Chief