

## Comorbidities Associated with Orofacial Pain and Headache: A Continuing Emphasis

In a previous editorial in this journal,<sup>1</sup> I drew attention to the various comorbidities that are associated with many orofacial pain and headache conditions. Several articles in this issue of the *Journal of Oral and Facial Pain & Headache* also bear on this topic and emphasize how comorbidities and socioeconomic factors must be taken into account for the prevention and successful management of these conditions at both the individual and population levels. In the case of socioeconomic influences, the article by Ardila et al outlines a study of the effects of social context on dental pain reported in adults of various ethnic groups in Colombia. Their findings that dental pain was associated with a low education level and other socioeconomic indicators underscore the importance of early prevention and timely oral health care to help minimize oral health problems later in life.

Temporomandibular disorders (TMD) and associated comorbid conditions are also more common in persons of lower socioeconomic status and in minorities.<sup>2</sup> In the article by Dahan et al, the authors investigated the number of comorbidities and the prevalence of five particular comorbidities in patients diagnosed as having either a myofascial or a non-myofascial (eg, articular) TMD condition. The number of comorbidities in patients with self-reported migraine or chronic fatigue syndrome was significantly higher in the myofascial TMD group. Psychological disturbances (eg, depression and anxiety) were commonly reported in both groups. These findings indicate that comorbid pain or psychological factors must be borne in mind in the management of TMD patients, especially those experiencing pain in the jaw musculature.

Psychosocial problems, as well as their management, are some of the several features considered in the article by Forsell et al, who studied the explanations of illness and treatment expectations from TMD patients reporting different levels of pain-related disability. They found that those TMD patients with high disability considered physical and stress-oriented factors as more important in explaining the cause and exacerbation of their pain and as targets for treatment efficacy as compared with TMD patients with no disability. Their findings underline the importance of screening for pain-related disability in the management of TMD patients.

Disability levels in TMD patients were also explored in the study outlined by Park et al, who correlated disability levels with sleep disturbance scores.

Sleep disturbance is well recognized as a common comorbidity in patients with a chronic pain condition, including TMD patients.<sup>3,4</sup> The article by Park et al found that sleep disturbance is especially apparent in those TMD patients with a high level of disability. They also found that these patients had significantly elevated plasma levels of proinflammatory cytokines, as well as the anti-inflammatory cytokine IL-10, which is also interesting in the context of sleep disturbances in TMD patients since anti-inflammatory cytokines have been shown to disrupt sleep. Other articles in this issue also address the role of cytokines (Hawkins and Durham) as well as other chemical mediators including endogenous opioids (Ma et al, Macedo et al) and purines (Qi et al) in animal models of orofacial pain. Collectively, the articles in this issue of the journal emphasize the multidimensionality of orofacial pain conditions and the many factors that must be considered in their etiology, pathogenesis, and management. They also underscore the applicability of the biopsychosocial model to orofacial pain and headache conditions.<sup>5,6</sup>

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### References

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