Orofacial Pain, Where Are We?

Scientific Meeting of the European Academy of Craniomandibular Disorders and the Spanish Society of Craniomandibular Disorders and Orofacial Pain
September 28 to October 1, 2006
Barcelona, Spain

The open scientific meeting of the European Academy of Craniomandibular Disorders was held in conjunction with a meeting of the Spanish Society of Craniomandibular Disorders and Orofacial Pain. The goal of the conference, attended by approximately 350 delegates, was "to create a platform for specialists and general practitioners in order to exchange knowledge and ideas about different issues in Orofacial Pain, to inform each other on the latest advances in this field and to advance our understanding of the pathophysiology and treatment of Orofacial Pain." This ambitious goal was addressed during the first 2 days. The last half day was devoted to poster presentations and short oral communications presented by non–Academy members (8) and by candidates for membership (23). It is academy policy that a candidate must give 2 presentations evaluated by scientific panels in order to become a full member. The following briefly outlines selected topics discussed at the meeting.

The first day, which was dedicated to the discussion of intra- and extra-articular craniomandibular disorders, started with a presentation of the "anchored disc" phenomenon by D. Nitzan. She pointed out that the phenomenon is likely caused by a change in joint lubrication as a consequence of joint overloading. Physiotherapy is not indicated as long as the disc is stuck to the fossa but is mandatory after arthrocentesis in order to decrease the risk of relapse. Decreased lubrication may also be the initial cause of disc displacement, as pointed out by S. Palla. Indeed, several in vitro studies have revealed that static joint loading, for instance during eccentric clenching, results in a significant increase in the tractional forces at the start of movement. This in turn may lead to a translation between condyle and disc; the polar ligaments may stretch until the disc becomes displaced. Interestingly, preliminary observations with true dynamic magnetic resonance imaging showed that a translation between condyle and disc can occur at the beginning and at the end of jaw opening in normal temporomandibular joints.

D. Paesani and F. Gomez discussed bruxism from both clinical as well as experimental perspectives. In particular, Gomez summarized the results of animal studies performed by his group, which point to the interesting hypothesis that bruxism could attenuate the effects of stress and anxiety. The last lecture of the day, by F. Lobbezoo, reviewed present knowledge on oral movement disorders. Generalized dyskinesias manifest in the orofacial region; however, there are also forms that only affect the orofacial area. The oral manifestations are in part directly related to the disorder and are in part medicine-related. Although the presence of these diseases complicates the management of dental problems, the literature on the topic is scarce, with no more than 112 papers in Medline.

The second day was dedicated to neuropathic pain, complex regional pain syndromes, migraine, and chronic daily headache. Neuropathic pain seems to play an important role in the etiology of several orofacial pain conditions, among which are persistent idiopathic tooth pain and facial pain. This is not surprising, as several dental therapies damage the trigeminal nerve fibers and can lead to sensory disturbances. The pathophysiological mechanisms behind neuropathic orofacial pain were discussed by P. Svensson, while the therapeutic approaches were outlined by J. L. Roldan, who addressed the different major classes of drugs used to treat neuropathic pain and their non-negligible side effects.

The complex regional pain syndromes are pain disorders that develop after trauma with (type I) or without (type II) a nerve lesion, usually affecting the limb. They are rarely diagnosed in the orofa-

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cial region. The clinical features (spontaneous pain, hyperalgesia, impairment of motor function, swelling, and autonomic abnormalities) and pathophysiology were discussed by one of the world's leading experts in this field, R. Baron. Despite the increased knowledge on the pathophysiology, therapy remains empirical and uses mechanism-based techniques. Treatment should be immediate and directed toward restoration of full function of the limb.

The discovery of the triptans has been a breakthrough in the therapy of the acute migraine attack. However, these drugs, like ergotamine or combination analgesics, may lead to chronic headache when used for more than 10 to 15 days per month. Therefore, there is a need for an effective prophylactic migraine therapy. Unfortunately, the prophylactic drugs (anticonvulsants, beta-blockers, serotonin or calcium antagonists) have a high incidence of adverse effects that may aggravate symptoms that are highly prevalent in migraine patients, such as depressive mood, fatigue, and attention deficit, as pointed out by J. Schoenen. The recent introduction of riboflavin and of the coenzyme Q10, which have an excellent efficacy/side effects ratio, has opened new avenues in the treatment of this primary headache form.

Unilateral posterior crossbite has been considered a risk factor for temporomandibular joint clicking. A well-designed epidemiologic study on this topic was presented on Sunday morning. The study, which was carried out by M. Farella et al in a sample of 1,291 young adolescents, failed to demonstrate a significant association between this occlusal form and disc displacement with reduction. Indeed, this condition was found in only 4.1% of the 157 participants with unilateral posterior crossbite.

All in all, this was a very interesting and stimulating scientific meeting, in which the topics of craniomandibular disorders and orofacial pain were discussed from different perspectives, with each speaker relying as far as possible on scientific evidence. The presentations made it clear that it is impossible to practice in the field of orofacial pain without a deep knowledge of all sources of orofacial pain. The organizing committee has to be congratulated also for an excellent social program that provided enough time for both stimulating scientific and nonscientific discussions among the participants.

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