

European Academy of Craniomandibular Disorders September 6–8, 2012 Paris, France

The theme of the 2012 meeting of the European Academy of Craniomandibular Disorders was decision making in pain and dysfunction. It was held September 6–8 in the beautiful School of Pharmacy of Paris, created in 1803 by Napoleon Bonaparte and renamed in 1970 as the Faculty of Pharmaceutical and Biological Sciences of the University of Paris Descartes.

The main meeting was preceded by a pre-congress course on pharmacology for chronic pain, which included a lecture on pharmacology of pain by Pierre Beaulieu from Montréal; a lecture on pharmacological management of orofacial pain by Joanna Zakrzewska from London; a workshop on pain assessment tools by Gary Heir from Newark; and a lecture on pain, sleep apnea, and bruxism by Franck Lobbezoo from Amsterdam.

The first day of the main meeting began with a session dealing with pain mechanisms and decision making. Luis Garcia-Larrea from Lyon talked about the ways in which brain imaging allows for the reconceptualization of the pain matrix. Dr Garcia-Larrea presented the structure of the pain experience as a unique model for investigating the interactions of sensory, cognitive, and emotional factors and argued that high-order interpretive phenomena such as empathy and compassion for pain are mainly associated with contextual responses, with little (if any) participation of nociceptive networks. Dr Garcia-Larrea argued that one of the important issues is what we remember of the pain experience and how we remember it. Dr Luis Villanueva from Paris talked about endogenous central modulatory mechanisms of trigeminal nociception and presented studies that support the concept that the trigeminal pain experience is a homeostatic emotion and an affective motivation, reflecting an adverse condition in the body which requires a behavioral response. This experience is processed by central mechanisms which generate reflexive autonomic and sensory responses that are under bidirectional brainstem, hypothalamic, and cortical controls. Disturbances in normal sensory processing within these sensory loops could lead to maladaptive changes, impaired oral or craniofacial functions, and consequent long-term modifications in pain perception. William Maixner from Chapel Hill, North Carolina, presented the need for the development of a conceptual model that refers to both biopsychosocial and

to genetic factors in pain. Dr Maixner discussed the contribution of genetic variants to human pain perception and temporomandibular disorders (TMD), and he presented findings from recently completed and ongoing cross-sectional and prospective studies that examine the biopsychosocial and genetic factors contributing to the onset and maintenance of TMD. Further discussion included emerging bioinformatic technologies that are proving useful in unraveling molecular networks that contribute to the clinical phenotypes observed in subpopulations of patients with persistent pain conditions.

The second morning session was devoted to discussing the effect of comorbidity on decision making. Michel Lanteri-Minet from Nice talked about the implications of migraine and tension-type headache for the orofacial pain practitioner. He presented epidemiological key elements, diagnostic criteria, and the general mechanisms of these primary headaches and discussed the clinical challenges when such primary headaches are associated with common oromandibular diseases. Dr Lanteri-Minet suggested that the association between TMD and primary headaches is probably related to sensitization phenomena and that treating TMD can limit the headache's progression. Guido Macaluso from Parma talked about the multifaceted interaction between pain and sleep. Sleep problems can exacerbate pain, and pain experience can be predictive for poor sleep. Apparently, up to 77% of orofacial pain patients complain of reduced sleep quality and quantity, and the subjective rating of poor sleep is associated with increased severity of pain and psychosocial distress. Moreover, a high prevalence of sleep disorders (insomnia, obstructive sleep apnea, sleep bruxism) has been found in orofacial pain patients. As there is a complex association between pain and sleep, clinicians should always investigate the sleep quality of their patients.

The afternoon session opened with a continuing discussion of pain mechanisms and decision making. Katja Wiech from Oxford used neuroimaging to show how beliefs modulate pain. Dr Wiech discussed evidence on the modulation of pain through beliefs (including religious beliefs) related to analgesia, perceived control over pain, and the threat value of pain. She presented recent methodological advances in studying pain modulation, including multivariate pattern analysis and computational modeling, and

discussed their utility within the framework of perceptual decision making. Kenneth Craig from Vancouver discussed facial expression as a source of pain empathy. Expression of another person's pain arises from neuroregulatory systems controlling automatic behavior (eg, reflexive escape, grimaces) and controlled reactions (eg, self-report, functional impairment). Facial grimaces are potent triggers of observer empathy. Not only are they basic to pain assessment in infants and people with cognitive impairment, but they also influence judgments of pain and credibility in people without communication limitations. At the end of the session, Luana Colloca from Bethesda presented a comprehensive overview of the nocebo effects, including research relating to the neurobiology of nocebo and suggestions regarding the ability to minimize nocebo effects for daily clinical practice. Dr Colloca presented imaging studies indicating that nocebo responses are associated with specific localized brain changes along with a deactivation of endogenous dopaminergic and opioidergic systems, and noted clinical studies investigating the relationship between informing patients about adverse side effects of a specific treatment and occurrence of adverse effects. Dr Colloca suggested that an effective translation of these studies into clinical practice will potentially facilitate improvement of symptoms through clinicians' compassionate and thoughtful words and attitudes.

The second day of the meeting opened with a session dealing with patient-perceived health, pain, and decision making. Jean-Paul Goulet from Québec City talked about clinical assessment of Axis I, arguing that the capacity of a given procedure to distinguish those with or without a target disorder differs whether the patient is seen in a primary, secondary, or tertiary care center. Dr Goulet presented an overview of the different tools and the contribution of the clinical examination and available diagnostic tests to reaching a diagnosis. There is always a certain degree of uncertainty that accompanies the diagnostic procedure. Using validated clinical prediction rules and diagnostic criteria can help diminish this uncertainty. Richard Ohrbach from Buffalo presented the Axis II psychosocial assessment and reviewed new assessment tools that can be integrated into the clinician's core functions of history taking and patient understanding. Mike John from Minneapolis talked about pain and quality of life, and specifically about health-related quality of life (HRQoL), which is widely applied to measure patients' multidimensional burden from a pain disorder. For the most common oral diseases, such as caries or periodontitis, oral health-related quality of life (OHRQoL) instruments have been developed, such as the Oral Health Impact Profile (OHIP), which offers the dental practitioner a practical tool to assess TMD and orofacial pain's psychosocial impact.

The following sessions dealt with cure-care and decision making. Michel Steenks from Utrecht talked about nonpharmacological management of orofacial pain, such as counseling, appliances, and physiotherapy. Sophie Baudic from Paris talked about repetitive transcranial magnetic stimulation (rTMS) as an emerging interesting tool in the relief of chronic pain, including orofacial pain. She presented evidence regarding the possibility of maintaining the analgesic effects of rTMS for more than 6 months. The analgesic effects were associated with an improvement in fatigue, catastrophizing, and quality of life. The effects of rTMS were also associated with a restoration of intracortical modulation, which may be involved in the mechanisms underlying its analgesic actions. Justin Durham from Newcastle talked about the importance of psychosocial factors in pain. The presentation focused on two particular types of chronic orofacial pain: TMD and persistent dentoalveolar pain (PDAP). Using qualitative data, Dr Durham explored the psychosocial impact of individuals' journeys through care, diagnosis, pain, and subsequent management, and compared the reported stigma between health and illness associated with TMD and PDAP. Maria Clotilde Carra from Parma talked about educational care in oral sleep disorders. Sleep-disordered breathing, sleep bruxism, and pain-related sleep complaints are prevalent in both adult and pediatric populations, and might be associated with severe consequences on general and oral health if not treated. Dr Carra reviewed the use of oral appliances, as well as other effective treatment approaches, such as patient education, behavioral modification, and cognitive therapy. Philippe De Jaegher from Paris talked about questions of cure and care in medical practice, including the gap between an idealized vision of anatomy or physiology and patients' health needs, as shown by the high prevalence of TMD associated with the low level of treatment requests. Dr De Jaegher argued that clinicians' main challenge is to decide with the patient what is desirable to do according to his/her specificities and scientifically validated knowledge. Terrie Cowley from Milwaukee talked about the patient's feeling. She presented information from the TMJ Association, which communicated with over 200,000 people through its website, over the years. Sandro Palla from Zurich concluded the meeting with an comprehensive synthesis of the information gathered during these two fascinating days.

The meeting was well organized by P. De Jaegher, B. Fleiter, J.F. Lалуque, P. Pionchon, J.D. Orthlieb, and A. Woda, and participants were grateful to them for a very educational experience.

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