The Vancouver Symposium: A Unique Focus on Nerve Damage and Neuropathic Trigeminal Pain

ome of the most common chronic pain conditions are manifested in the orofacial region, including musculoskeletal and temporomandibular pain, arthritis, and neuropathic conditions such as stomatodynia (burning mouth), atypical odontalgia, trigeminal neuralgia and postherpetic neuralgia, and pain resulting from nerve damage. Factors contributing to nerve injury-induced neuropathic trigeminal pain include genetic and gender predispositions to orofacial pain; trauma to the face or mouth (eg, vehicle or work accident); neuropathology (eg, trigeminal neuralgia, herpes zoster); and delayed nerve healing following trauma, surgery, or root canal treatment. While neuropathic pain resulting from orofacial nerve damage is relatively low in prevalence, it is especially challenging because of the limited knowledge of the underlying mechanisms and pathogenesis and the lack of standardized assessment and efficacious management approaches for most patients, who may suffer excruciating pain.

Recent investigations in humans and animal models of neuropathic pain have indicated that neuropathic pain conditions may be associated with structural, neurochemical, and functional changes in the central nervous system. Thus, neuropathic pain is currently considered a disorder of the nervous system with specific management needs that go beyond the actual level of knowledge. The same applies to neuropathic trigeminal pain, which has been identified as the most challenging trigeminal pain by the Orofacial Pain Special Interest Group (SIG) of the International Association for the Study of Pain. Therefore, SIG members decided to organize a symposium on the topic, which was held in Vancouver in May 2004. The Symposium, titled "Nerve Damage and Neuropathic Trigeminal Pain," had the following objectives: (1) generate awareness of trigeminal nerve damage and possible consequences of neuropathic trigeminal pain, in order to improve knowledge of the underlying mechanisms, prevention, and treatment; (2) foster the development of a short-term strategic and focused research plan on the topic; and (3) develop research networking by bringing together basic scientists, clinicians, and other world leaders in neuropathic pain research. Therefore, a blend of orofacial pain researchers, dental clinicians, medical specialists, clinician scientists, and biomedical pain researchers with specific expertise in the basic and clinical science and clinical management of neuropathic pain were selected to present at the Vancouver symposium.

The symposium was attended by 130 participants from 12 countries. It was sponsored by nonprofit organizations such as the Oral Health Research Network from the Fonds de la Recherche en Sante du Quebec and the Quebec Pain Research Initiative from Valorisation Recherche Quebec and 3 of the Canadian Institutes of Health Research (CIHR): 1-Neurosciences, Mental Health and Addiction; 2-Musculoskeletal Health and Arthritis, 3-Aging. The University of Toronto and its CIHR training grant titled "Pain: Molecules to Community" also contributed, and the Universite de Montreal dental school provided logistic support. The following pharmaceutical companies also lent financial support to the symposium: Allergan, Wyeth Consumer Healthcare, Purdue Pharma, Pfizer Canada, AstraZeneca, and Merck Frosst Canada.

A broad range of topics was presented and discussed. The presentations are summarized in the articles published in this issue of the Journal of Orofacial Pain. It can be noted that several topics were identified as avenues for further clinical and basic research in the effort to improve understanding and management of neuropathic trigeminal pain. These include (1) development and study of animal models of neuropathic trigeminal pain, (2) peripheral and central mechanisms that underlie the development and maintenance of neuropathic pain, (3) development of a practical, unified, and comprehensive classification system, (4) assessment of risk factors (eg, genetic, gender, age, comorbidity, dental procedures), (5) population-based epidemiology, (6) standardization and validation of assessment procedures used to estimate sensory changes, and (7) emergence of safe and efficacious management strategies.

As co-organizers of the symposium, we want to thank all speakers who have also contributed papers to this issue of the journal, SIG meeting committee members (Drs T. Dao, R. Ohrbach, F. Pereira, P. Svensson, and K. Wajima), and local arrangements subcommittee members (Drs B. Cairns and C. Peck, Ms C. Manzini, Ms C. Remo, and Ms F. Yuen) for the success of the event. We are also greatly encouraged by the success of the symposium, which was a unique vehicle for transferring knowledge and fostering discussion on the topic between basic and clinical scientists as well as clinicians. We are hopeful that these proceedings of the Orofacial SIG Symposium will heighten awareness of the topic by clinicians working in the field of orofacial pain as well as encourage scientists around the world to increase their efforts in improving our understanding of neuropathic trigeminal pain. We also are pleased that the enthusiasm generated by the symposium has led to plans for another SIG symposium in 2 years' time.

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