## Meeting Review

## Ninth World Congress International Association for the Study of Pain

## August 22–27, 1999 Vienna, Austria

Exponential growth has struck the triennial congress of the International Association for the Study of Pain (IASP). More than 6,000 delegates attended (compared to 3,700 in Vancouver 3 years ago), and more than 350 poster presentations took place each day in addition to the plenary sessions and workshops. As usual, this congress was a highlight for everyone interested in the study and management of pain—the perfect venue for interaction between basic scientists, clinical researchers, and health professionals from all the different disciplines involved in pain management.

The refresher courses that preceded the congress provided an excellent opportunity to gain state-ofthe-art knowledge in a particular field. For orofacial pain and headache, the focus was on new developments in the prophylaxis (H. Diener and V. Limmroth) and pathophysiology (P. Goadsby) of migraine and cluster headache, the use of the triptans in this respect (M. Ferrari and K. Roon), and the assessment and management of orofacial pain (S. Graff-Radford). It was apparent that progress in the basic sciences would influence clinical decision-making in the near future: the discovery of a special gene on chromosome 19 for some kinds of migraine and the "redefinition" of migraine as a "calcium channel-opathy" reflect the changes clinicians will face regarding diagnosis, classification, and probably also management of the problem. The role of ion channels in pain has inspired considerable recent animal research, especially in the development of chronicity. Some of the channel receptors have already been cloned, and this will probably lead to the development of new analgesics that are channel-specific and might thus provide better tolerance properties. Some appear to have better analgesic properties than morphine without the risk of tolerance or respiratory depression. The same strategy of focusing on the channels might improve the local anesthetics that are currently available.

An obvious trend is the appreciation of genetics in the development and evolution of pain (J. Mogil, Z. Seltzer, J. Woolf, A. Mannes, and M. Devor). Posttraumatic neuropathic pain, one of the most common and difficult chronic pain conditions to treat (eg, sciatic pain, diabetic neuropathies, phantom pain, postsurgical pain, cancer pain), poses many questions about its mechanisms to researchers and clinicians. The enormous individual variability in the presentation of this pain, even after similar traumatic events, was puzzling until recent animal research showed a hereditary factor, located on an autosomal recessive gene, that might be responsible. More can be expected from animal research, where both trauma and genetic composition can be controlled. Transferring these data to the human situation is of course extremely difficult, and the scientific literature limits our knowledge to the (subjective) description of "families with a painprone profile." Recent data have proven that pain and pain behavior are inherited, at least in mice in the laboratory; pain-prone and pain-resistant strains of mice can be bred after 6 generations. One could envision future treatments modified according to the pre-existing genetic scheme. Most important, this would eliminate the stigma of patients who until now have often been labeled as "too sensitive" or having a "lack of resistance."

One of the highlights of the congress was a plenary lecture by A. Basbaum, stressing the conceptual change from pain as a symptom to pain as a disease. This shift has led to the realization that pain can modify the central nervous system, sometimes permanently. This implies that it would be acceptable to talk about a "memory of pain" imprinted in the central nervous system and based upon prior trauma. As mentioned earlier, genetic research in animals has especially elucidated this process. The hope exists that someday it will be possible to treat some resistant pain conditions through genetic manipulation, not by destroying some specific genes, but by focusing on the proteins that they produce or by selectively destroying subclasses of nociceptive neurons by the use of toxins coupled to neurotransmitters (M. Nichols, L. Urban, and A. Alloui).

The new findings on residual pain following trauma have implications for the management of posttraumatic orofacial pain. After trauma, an unordered reorganization of the injured nerve fibers appears between the site of the trauma and the central nervous system. The initial neuronal silence is replaced by a disorganized proliferation with aberrant connections, profoundly disturbing the neurotransmitter process. The resulting neuronal hyperactivity occurs within the first 24 hours after injury and may be associated with extreme, sometimes incapacitating, pain. It was stressed by Z. Wiesenfield-Hallin that neurosurgical approaches to such neuropathic pain are often detrimental and should be avoided: "We should abandon the idea that we could treat chronic posttraumatic neuropathies using a new trauma. The relative analgesia provided by such treatments is of short duration, and the pains reappear systematically. . . "

Topical workshops and sessions pertaining to the orofacial region were numerous. The topic of sex differences and pain benefited from the expertise of L. LeResche, who highlighted differences in the epidemiology of various pain conditions and their relationship to stages of the life cycle, while C. Miaskowski illustrated sex differences in response to analgesic medications. An interesting workshop on diagnostic and therapeutic aspects of chronic orofacial pain was also held (unfortunately at the same time as the above-mentioned session). J. Marbach, K. Raphael, and G. Rollman discussed the psychologic and psychiatric influences on and consequences of chronic orofacial pain.

Two important events deserve mention. Our Editor-in-Chief, Barry Sessle, was elected president of this prestigious worldwide organization. In additon to this appointment serving as an indication of the appreciation for his enormous scientific work and activities, I am convinced that in this position, Barry will foster the progress of our field of orofacial pain and temporomandibular disorders. Second, as one of his first inspired actions as president, Barry asked me to coordinate the installation of a special interest group on orofacial pain within the IASP. This will enable multidisciplinary contacts and cooperation in various issues pertaining to this field. All interested IASP members are invited to contact me for information on the developments and initiatives.

-Antoon De Laat, LDS, GHO

## UCLA RESIDENCY IN OROFACIAL PAIN AND DYSFUNCTION WITH OPPORTUNITY FOR ARTICULATION WITH OR SEQUENTIAL PhD OR MS DEGREE IN ORAL BIOLOGY

UCLA is inviting applications to the above clinical and academic residency training program by graduates of US-recognized schools. This is a 2-year full-time paid residency program (\$30,000 per annum) that provides a strong foundation in pain science as well as more traditional dental areas. This includes hands-on treatment experience in chronic and complex pain, including neuropathic pain, head and neck pain, and headache, to medical and dental standards of care.

Candidates are expected to apply to the MS in Oral Biology degree program during their second year. Qualified candidates are encouraged to apply competitively to the PhD program sequentially, or for highly qualified candidates, to start an integrated PhD with a clinical training program.

International students for 2000-2001 are invited to apply to the UCLA preceptorship program.

Preferred application receipt date is January 15th for a July 1, 2000, residency start date. To apply or for more information contact: UCLA School of Dentistry, Office of Admissions and Student Alumni Affairs, Center for the Health Sciences, Room A3-042, 10833 Le Conte Ave, Los Angeles, CA 90095-1762. Fax: (310) 825-9808. E-mail: emarques@dent.ucla.edu. Website: www.ddsdetective.dent.ucla.edu/index.asp