

REVIEW OF THE 14TH WORLD CONGRESS ON PAIN 27-31 AUGUST, 2012, MILAN, ITALY

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The World Congress on Pain (WCP), organised every two years by the International Association for the Study of Pain (IASP), is devoted to pain research and treatment. The 2012 congress in Milan was attended by over 7500 delegates from 110 different countries, with all stakeholders represented at this international, multidisciplinary and multicultural congress.



The IASP leads the way worldwide in promoting research, education and training in the field of pain. It brings together scientists, clinicians, healthcare providers and policy-makers to stimulate and support the study of pain and to translate that knowledge into improved pain relief worldwide. Each year, the IASP chooses a specific topic as a theme. In the coming year, the theme will be visceral pain and therefore of particular interest to IC/PBS patients.

While many IC patients tend to feel that nobody is doing anything about their pain, I can assure them that this was most definitely not the case at WCP in Milan. Although this was a congress on pain in the widest sense of the word, chronic pelvic and bladder pain received every attention. We heard about the very latest research and in what directions this is likely to develop further in the coming years. “Central sensitisation” is the current buzzword, with much attention paid to “comorbidities” and the psycho-social impact of pain disorders, with anxiety/depression, sleep disorders and fear-avoidance being recurrent themes.

However, we in the painful bladder world need to ensure that the often equally devastating bladder symptoms of urgency and frequency do not get forgotten or snowed under in the research and treatment of chronic pain.

Pain of UroGenital Origin (PUGO) Symposium “Taking care of the patient with chronic pelvic pain”

On the Sunday prior to the start of the congress, satellite symposiums were organised by the IASP special interest groups or SIGs, including the symposium on “Taking Care of the Patient with Chronic Pelvic Pain”, organised by the Pain of UroGenital Origin (PUGO) special interest group. Many patients suffer from chronic pelvic pain – including bladder pain, vulvodynia, irritable bowel syndrome, endometriosis etc – and many different disciplines are involved in caring for these patients. This satellite symposium underlined the fact that a multidisciplinary approach is needed.

Following a brief introduction by chair Bert Messelink, MD, urologist in the Netherlands, the first session was devoted to Pelvic Pain: from Acute to Chronic. The first speaker was clinical psychologist and physiologist Melissa Farmer, PhD, from the USA, looking at somatic mechanisms of pelvic pain. Here too the focus was on chronic pain and how the brain now appears to adapt to the presence of chronic pain. Technological advances in imaging now allow changes caused by chronic pain to be seen in different parts of the brain. There appear to be different time-scales for this, with some

changes going faster than others. Would the effect of the presence of “comorbidities” accelerate the process of “fixing” the pain in the brain, asked the speaker? Would the changes then be more widespread? It is hoped that answers to some of these questions will eventually be provided by the NIDDK’s Multidisciplinary Approach to the Study of Chronic Pelvic Pain (MAPP) study.

Dean Tripp, PhD, psychologist from Canada, explained how patients can lose their identity due to pain. Patients feel trapped and helpless. He looked at moderating factors that might change the perception of pain in a patient, suggesting that different types of support, including spousal support, might deflect or buffer the symptoms. Chronic pelvic and bladder pain can lead to depression, anxiety, insomnia (sleep disturbances), helplessness, disability and patients need considerable social support. However, this impact varies greatly from patient to patient with some suffering severely from depression and others scarcely at all.

Referring to recent research on suicide ideation, and the high percentage of patients admitting to thinking about suicide, he said that most people do not realize just how many patients think about suicide because of the impact of their symptoms on their life. He said that a study had shown that 23% of women with IC/BPS symptoms endorsed having suicidal ideation in the prior two weeks. While this rate is high, he added that the statistics from studies may indeed be a considerable underestimation since many patients may be reluctant to admit to having suicidal thoughts or even to discuss the matter.

Frank Tu, MD from the USA reviewed contemporary published guidelines for the management of female pelvic pain, noting that a uniform definition of CPP and standardized evaluation of participants are lacking across the literature. He also noted that study populations appear to vary widely and studies may be reporting effects from treating symptoms rather than a diagnosed condition.

John Hughes, MD (UK) examined the role of pain management in treatment. He felt that there was often misunderstanding of what is meant by the term “management” and therefore provided two definitions:

- Management: the treatment or control of diseases or disorders, or the care of patients who suffer them.
- Treatment: medical care given to a patient for an illness or injury.

His summary for the approach to pain management was as follows:

- Biopsychosocial assessment
- Investigations as appropriate
- Manage distress
- Reduce disability/restore function
- Optimise medication
- Liaise with primary and secondary care teams
- Advice and education for:
 - Patients
 - Carers
 - Community

He noted that the pain of most patients is managed at a primary care level, while some go to pain management units and a few go to specialist pain management units.

When assessing pain, he felt that the history should include the impact on the quality of life, noting the impact on everyday activities, such as: walking, sitting, standing, work, sleep, mood, concentration, relations with others. Multimodal management should cover the three aspects: physical, psychological and pharmacological. Patients should be involved in their pain management. Some patients prefer to have less sedation and have their brain back rather than get rid of all their pain. An endeavour should be made to rehabilitate the patient, with the aim of returning to a more active lifestyle and to keep the patient functioning as well as possible under the given circumstances.

Stephanie Prendergast, MPT, from California, looked at physical therapy management of chronic pelvic pain in both male and female patients. A physical therapy treatment plan could consist of: patient education; 1-2 hours treatment a week, 12 weeks minimum; coordination with other medical providers in a multidisciplinary treatment plan; manual therapy techniques; central de-sensitization techniques; home exercise programme; home self or partner therapy; lifestyle modifications.

The patient perspective was not forgotten either at this symposium, with Judy Birch from the Pelvic Pain Support Network in the UK looking at educational opportunities from a patient perspective. This theme was continued by Bert Messelink, MD, who again emphasized that education needs to focus on:

- **Patients**
 - acute and chronic
- **Relatives**
 - of patients with pain
- **Society**
 - decision-makers
 - politicians
 - everyone

REFRESHER COURSES

Monday 27 August comprised a wide variety of Refresher Courses. In the morning I attended an interesting presentation by rheumatologist Dan Clauw, MD – well-known to the IC world - who claimed that “our current paradigms for diagnosing and treating chronic pain are antiquated!” “We’ve been looking for pain in all the wrong places”, he said, noting:

“There is no chronic pain state where the degree of damage or inflammation in the periphery (i.e. nociceptive input) correlates well with the amount of pain. However, our diagnostic paradigms – and the terms we use to describe chronic pain states – imply otherwise. Until recently, many assumed that when there was a disparity between peripheral findings and pain, this was primarily due to psychological factors.” However, according to Dr Clauw, “we now understand that non-psychological central nervous system factors can markedly increase (sensitization) or decrease pain sensitivity.”

Looking at the clinical characteristics of central or centralised pain, he noted that it is typically characterised by: multifocal pain, higher current and lifetime history of pain, multiple other somatic symptoms (such as fatigue, memory problems, sleep disturbances).

Explaining what is meant by a pain prone phenotype, he reported the same phenotypic features in individuals with centralised pain states such as fibromyalgia. He looked at stressors that might be capable of triggering off these illnesses, including early life stressors, peripheral pain syndromes, physical trauma (such as car accidents), certain catastrophic events, and infections.

In his summary, he suggested that all chronic pain states may be “mixed” pain states with variable peripheral and central contributions in different individuals with the same clinical label.

In the afternoon, the many courses included “Pathophysiology, diagnosis and treatment of persistent abdominopelvic pain”, with Drs Fred Howard, Karen Berkley and Emeran Mayer as speakers. In his introduction, Dr Howard pointed out that chronic pelvic pain is a major and widespread problem.

Dr Berkley explained that dysmenorrhoea is common and often co-occurs with many other chronic pain conditions. However, it is unknown if dysmenorrhoea predisposes women to other conditions because dysmenorrhoea has been virtually ignored by the pain community.

Looking at pain mechanisms, she noted that pain is an emergent function of the nervous system. When pain becomes chronic, excitatory and inhibitory processes within the central nervous system are altered, affecting the brain’s structure, chemistry and functional interconnections. She also suggested that specific characteristics of these alterations may be unique for each individual, forming a dynamic pain signature for that individual that could vary over time. This could affect treatment, the implication being that the most effective treatment approaches are likely to be individualised and multimodal.

Emeran Mayer, MD, focused more on the gastrointestinal tract aspects of pain, concluding that there is growing evidence to support a model of altered brain/gut interactions to explain IBS pathophysiology, even though it remains to be determined if brain or intestinal alterations are the primary problem. He also suggested that alterations in gut microbiota may play a role in altering brain/gut interactions during brain development (*gut microbiota = an assortment of microorganisms inhabiting the length and width of the gastrointestinal tract*). He felt that at the present time tricyclic antidepressants and various cognitive behavioural approaches continue to be the most effective treatments. Dr Mayer stressed that despite much research, there has been no significant breakthrough with regard to treatment.

Dr Fred Howard rounded off the course with a number of case studies.

TOPICAL WORKSHOP: NEW ASPECTS IN PERIPHERAL AND CENTRAL MECHANISMS OF PAINFUL BLADDER SYNDROME/INTERSTITIAL CYSTITIS

Moderator: Matthew Fraser, PhD. Presenters: Lori Birder PhD, Emeran Mayer, MD, Tomohiro Ueda PhD.

In her presentation, Dr Lori Birder looked beyond neurons: cystitis and associated epithelial dysfunction, noting that a number of clinical problems (e.g. cystitis, overactive bladder) may originate not only from dysfunction of the peripheral or central nervous pathways, but may also involve the urothelium or other components (smooth muscle). The urothelium is a multi-layer epithelium with both sensory and barrier functions. She explained that urothelial cells play a role in the transfer of information from the urinary bladder to the nervous system. Looking at the barrier function, she said that this can be altered by various stressors in health and disease. She emphasised that understanding roles of epithelial cells is important in both health and disease, noting that there is evidence to indicate that chronic complex syndromes are associated with alterations in epithelial barrier/sensor function. Dr Birder then explained about the role of “cadherins”, a cell adhesion molecule involved in epithelial structure and repair, suggesting that this might be a factor in PBS/IC associated epithelial weakness and increased susceptibility to damage. Altered integrity of the bladder/urine interface can activate underlying bladder nerves, resulting in urgency, frequency and

pain during distension. The big question is then: can the damaged urothelium be repaired? While many treatments claim to temporarily repair the bladder wall, Dr Birder suggested that perhaps liposomes may be able to increase healing and repair, so as to improve the barrier function of the urothelium.

On the topic of co-morbid syndromes, she noted that many of these functional syndromes may involve a disturbance of the epithelium. However, the mechanisms underlying these changes in epithelial barrier are not yet well understood. On the basis of their studies with cats, she believes that changes in barrier function may lead to symptoms of hypersensitivity and pain.

The urothelium is not just a barrier, however. It also has sensory roles and this fact may make the urothelium a target for multiple therapies.

Dr Emeran Mayer gave a presentation on the topic of the use of neuroimaging techniques to identify syndrome-related alterations in structural and functional brain networks. Much of this is experimental and ongoing. Nevertheless, it was amazing to see how this important research is developing. He looked at the differences in acute versus chronic pain and specifically at brain alterations in IBS and IC/PBS. Much of this work is being done within the framework of the MAPP project in the USA.

Tomohiro Ueda, MD, from Japan, discussed new aspects in immunological mechanisms of bladder pain syndrome/interstitial cystitis and looked at terminology and definitions – including the “hypersensitive bladder syndrome” - in the Asian IC guideline, which differs in some respects from Western guidelines.

IASP BOOKS

New books available from the IASP Press include:

PAIN-RELATED FEAR: EXPOSURE-BASED TREATMENT FOR CHRONIC PAIN

Authors: Johan Vlaeyen, Stephen Morley, Steven J. Linton, Katja Boersma, Jeroen de Jong

Published: 2012

Softcover, 196 pages, with disc

ISBN-13: 978-0-931092-87-9

http://www.iasp-pain.org/AM/Template.cfm?Section=IASP_Press_Books2&Template=/CM/HTMLDisplay.cfm&ContentID=15853

This book identifies fear of movement and injury as a primary issue in chronic pain management. It provides a detailed treatment manual on exposure-based techniques for the reduction of pain-related fear and disability in chronic pain. Includes a disc with therapist and patient materials and videos.

PAIN COMORBIDITIES: UNDERSTANDING AND TREATING THE COMPLEX PATIENT

Editors: Maria Adele Giamberardino, Troels Staehelin Jensen

Published: 2012

Softcover, 507 pages

ISBN-13: 978-0-931092-92-3

http://www.iasp-pain.org/AM/Template.cfm?Section=IASP_Press_Books2&Template=/CM/HTMLDisplay.cfm&ContentID=15718

An in-depth analysis of complex clinical situations involving multiple concurrent diseases, this book reviews the clinical presentation and management of interactions among medical conditions, including myofascial pain, headache, fibromyalgia, visceral pain, hypertension, diabetes, osteoarthritis, low back pain, obesity, depression, and anxiety.

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