

36th Annual Conference of the International Continence Society Christchurch, New Zealand, 27 November – 1 December 2006

Review by Jane Meijlink

The snowcapped Southern Alps formed the magnificent backdrop to the 2006 annual conference of the International Continence Society in Christchurch, on the south island of New Zealand. A welcome reception at the town hall included an age-old Maori ritual welcoming ceremony: the Powhiri, with the traditional hongiri (pressing of noses) as a formal salutation, while haunting bird-calls echoed around the auditorium.



Conference chairman Professor Ted Arnold (left) with Rev Maurice Gray (right), head of the local tribe of Maori people

Although this was a long journey via Singapore to the other side of the world and southern hemisphere, it was nevertheless a very worthwhile journey since my stay in Christchurch was multipurpose: participating in an IC patient conference as speaker, organising an IC info booth at ICS 2006 together with our New Zealand colleagues, attending the ICS scientific conference and speaking on the Patient Perspective at an ICS workshop on PBS/IC.

IC Patient meeting, Christchurch



Dot Milne

Before the ICS annual conference got underway, a 2-day conference was held in Christchurch 25/26 November for IC patients, immediately prior to the start of ICS 2006. This mammoth undertaking was superbly organised by Dot Milne, who is both a patient and a registered nurse as well as coordinator of the **NZ Interstitial Cystitis Support Group**, together with her enthusiastic committee. Patients and their partners travelled from all over New Zealand to participate in this meeting. The NZ ICSG started as a small group around 8 years ago and currently has over 100 members. According to Dot Milne, this number is probably just the tip of the iceberg.

Speakers included a psychologist Mike McKinney, a pain management consultant Rick Acland, well-known IC urogynaecologist Anna Rosamilia over from Australia for the ICS

conference and Jane Meijlink from the International Painful Bladder Foundation. There was also a workshop on 'Travel with IC' and a parallel workshop for 'Partners of IC sufferers'. It was an excellent weekend programme and Dot Milne and her committee should be congratulated.

IC Info Booth at ICS conference (IPBF + NZ ICSG)

...“What exactly are the international standard diagnostic procedures?”



Dot Milne at the IC info booth

Thanks to the ICS conference chairman and organising committee, the IPBF + New Zealand IC Support Group were lucky enough to be one of the non-profit organisations to be given a complimentary booth at ICS 2006. The location of the non-profit booths was ideal, next to the registration desks, facing the tables for lunch and refreshments and opposite the entrance leading to and from the trade exhibition. This resulted in intensive traffic and many visits to our booth. This was a unique opportunity for the New Zealand ICSG not only to raise awareness of IC, but also to increase its profile among health professionals in the region. This goal certainly succeeded. In addition to doctors from various disciplines, there was huge

interest by physiotherapists and nurses. Bearing in mind the many changes the IC movement is currently undergoing, it was not surprising to find many doctors rather confused regarding standard terminology, definitions and diagnostic procedures. A regular question on the booth from the doctors was: “what exactly are the international standard diagnostic procedures?”

As many patient support groups will know from their own experience, running an info table on IC at the present time is no easy matter with so much confusion and so little international consensus. Let us hope that the 2nd ICICJ international consultation on IC in Kyoto in March 2007 will lead to at least some international agreement on standards and that these are standards that will ensure that no (potential) IC patients slip through the net and are left with neither diagnosis nor treatment.

Taboos

We heard much about social taboos and incontinence during this conference. This was particularly apt since the word taboo originated in this part of the world and comes from the Polynesian culture. The socio-cultural taboo on anything related to incontinence and bladders among the indigenous people of Australia and New Zealand is so great that many do not seek medical help. Negative attitudes and a sense of shame can make people feel alienated from their family and friends. However, thanks to Captain James Cook in the 18th century, that word ‘taboo’ has spread all round the world and still goes hand in hand with bladder problems everywhere.

In order to combat this problem, the Australian Commonwealth Government has produced an ingenious cartoon comic strip brochure on incontinence for indigenous Australians (Aboriginals and Torres Strait Islanders) entitled “The Continence Gang – Stories of gaining control over bladder and bowels”, by Esther Quintal and superbly illustrated by Simon Kneebone. This could be a wonderful idea for other bladder problems (including IC) in countries with similar indigenous populations.

Australians take their toilets seriously

Take a look at the Australian National Public Toilet Map website: www.toiletmap.gov.au

This is a project of the National Continence Management Strategy of Australia. If every national and local authority around the world took its public toilet responsibilities as seriously, life would be a lot easier for PBS/IC patients.

ICS Workshops and Scientific Programme

The selection of courses and workshops offered a number which were special interest to the IC movement including:

Workshop 7: Painful Bladder Syndrome/interstitial cystitis and associated disorder: diagnosis and treatment. Speakers: Jørgen Nordling, Anna Rosamilia, Jane Meijlink, Ralph Peeker.

It was particularly interesting in workshop 7 to note the often quite different approaches taken to PBS/IC in (northern) Europe and Australia. The fact that a number of key players in this field in Australia are (uro)gynaecologists may at least in part account for this difference in approach. There is clearly great involvement in PBS/IC in this part of the world by physiotherapists and a strong tendency to see PBS/IC in the wider context of the pelvic floor and to take a 'pelvic' approach to treatment. This once again underlines regional differences - including socio-cultural influences - in the approach to PBS/IC. Professor Jørgen Nordling, chairman of the European Society for the Study of IC/PBS (ESSIC), told participants that the lack of international consensus on diagnostic criteria for PBS/IC is a major problem since very divergent methods of reaching a diagnosis are currently being used in clinical practice. In 2004 the European ESSIC published recommendations for primary evaluation of patients suspected of having IC.(1) Using this standard would facilitate comparison between studies. This European standard also includes biopsies obtained at cystoscopy. According to Professor Nordling, biopsies help to support the clinical diagnosis of classical ulcer disease and to exclude carcinoma *in situ* and tuberculous cystitis.

In Australia biopsy would usually only be performed in the clinical setting of severe disease, unlike Europe where it is commonly seen as a standard diagnostic procedure. Commenting on cystoscopy and glomerulations, Dr Anna Rosamilia said that glomerulations are most likely a reflection of a chronically underdistended bladder and not specific to IC. Not all patients with symptoms of PBS/IC have glomerulations and not all patients with glomerulations have symptoms of PBS/IC. Further studies are needed in this area.

The speakers believed that the difference between IC and overactive bladder is likely to be an important topic of discussion and research in the coming years.

On the subject of the Patient Perspective, Jane Meijlink emphasised that PBS/IC patients need a great deal of support and understanding from their doctor. The doctor's role in emotional support is of immense importance and should not be underestimated. When faced with a doctor who has neither time nor sympathy for them, patients are likely to become depressed and even suicidal. She told participants that IC can have a major impact on all aspects of a patient's life and on the life of their family.

(1) Nordling J et al. Primary evaluation of patients suspected of having interstitial cystitis. European Urology 2004;45:662-9.

Workshop 25: Pelvic floor muscle and bladder pain syndromes: conservative management.
Speakers: Helena Frawley, Wendy Bower, Anna Rosamilia, Fetske Hogen-Esch, Sherin Jarvis.

The regional differences were also apparent in Workshop 25 which looked at conservative management in the form of physiotherapy for different pelvic pain syndromes. Physiotherapists are accustomed to looking at the functioning of the whole person, including lifestyle and behaviour (coping strategies). This can be of great benefit to patients suffering from pain syndromes. It was notable that all speakers in this workshop independently stated that the confusion regarding terminology (many different terms being used for one concept) was a great hindrance in their work, particularly when doing literature searches.

With regard to evaluation of this complex condition, Dr Anna Rosamilia explained that there is “difficulty in describing and quantifying each of the symptoms which are part of the painful bladder syndrome. Day and nighttime frequency can be altered by reduction of fluid intake and absolute numbers are therefore not as helpful as volume voided which can be obtained from a 24 hour urinary diary. In clinical practice, consistently small urine volumes associated with pain or discomfort rather than incontinence is a distinguishing feature from bladder overactivity.” Concerning treatment, she emphasised that it is now essential to rigorously evaluate both old and new treatments so as to facilitate decision-making on therapy.

Workshop 15: More than just a barrier: Urothelium as a drug target for urinary bladder pain.

Speakers: Lori Birder, Richardo Saban, Marcus Drake, Jenny Southgate, Francisco Cruz and Janet Yeast.

According to Dr Lori Birder, while the urinary bladder urothelium has been historically viewed as primarily a “barrier”, it is becoming increasingly appreciated as a responsive structure capable of detecting physiological and chemical stimuli, and releasing a number of signalling molecules. She explained that taken together, elucidation of mechanisms impacting on urothelial functions in addition to how pathology may impact on mechanisms of urothelial communication may provide important insight into targets for new treatment for lower urinary tract disorders. Dr Ricardo Saban told participants that functional disorders of the bladder involve detrusor muscle/urothelium communication. Bladder overactivity has been attributed to dysfunction of the detrusor muscle and almost every major bladder disease – including cancer, interstitial cystitis and infection – involves the urothelium. However there is as yet little information about detrusor and urothelium transcriptomes, particularly in relation to inflammation. When discussing regulatory networks, he said that these networks represent key targets for development of new drugs for bladder diseases. Other speakers emphasised that there are many unanswered questions, but that ongoing scientific research could potentially identify new targets for therapy. Francisco Cruz, speaking on TRPV1 expression in human urothelial cells, said that their study data indicating that TRPV1 occurring in human urothelial cells exhibits some properties previously identified in sensory neurons means that human urothelial TRPV1 may contribute to bladder changes occurring during cystitis. The final speaker discussed early development of urothelial innervation and maintenance of normal innervation in the healthy adult bladder, as well as innervation following experimental treatment with cyclophosphamide.

This is a developing field about which we will undoubtedly hear much more in the coming years. Other scientific presentations on basic science in the ICS 2006 scientific programme also concentrated on the role of the urothelium in lower urinary tract disorders.

Abstracts and posters

A striking number of abstracts were submitted in the field of PBS/IC, indicating the substantial increase in interest in this condition in recent years. Only a small selection can be mentioned here.

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Multiple-chemical sensitivity: is this condition related to painful bladder syndrome?

Yoshida H, Ueda T, Nakagawa M, Ito Y.

Because chemicals such as lipopolysaccharides, carbachol and hydrochloric acid have been shown to induce lower urinary tract symptoms, some chemical agents have been considered to be possible causes of PBS. However this is the first clinical study to look into the relationship between exposure to chemical agents and PBS. 63 patients were enrolled in this study in Japan in which they were asked to reply to a questionnaire for multiple-chemical sensitivity (MCS) called Quick Environment Exposure Inventory (QEESI). This questionnaire comprised 50 questions and patients were then classified into four categories according to the criteria of severity and susceptibility of MCS: 'very suggestive' (14 cases), 'somewhat suggestive' (5 cases), 'problematic' (8 cases) and 'not suggestive' (36 cases). A significantly high proportion (22.2%) of PBS patients were classified as 'very suggestive' compared to data on the Japanese population as a whole (3.8%).

The researchers conclude that this study has shown that hypersensitivity to chemicals is one of the possible factors for development of painful bladder symptoms. Further studies are planned.

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Muscarinic receptors subtypes M2 and M3 in human urinary bladder disorders and their clinical correlations.

Underwood J, Mukerji G, Yiangou Y, Grogono J, Agarwal S, Khullar V, Anand P.

The researchers explain that the cellular localisation and role(s) of different muscarinic receptors in human urinary bladder syndromes is still uncertain. This study examined the muscarinic receptor subtypes M2 and M3 in the human urinary bladder, and related changes in the receptor density of patients with detrusor overactivity, painful bladder syndrome and controls to clinical measures such as urinary frequency and urgency.

Bladder specimens obtained from patients with painful bladder syndrome, idiopathic detrusor overactivity and asymptomatic microscopic hematuria were immunostained using specific antibodies to muscarinic receptor subtypes M2, M3 and vimentin (a marker for myofibroblasts). The increase in M2 and M3 immunostaining in myofibroblast-like cells in clinical bladder syndromes and correlation with clinical scores suggests a potential role in pathophysiological mechanisms and the therapeutic effect of anti-muscarinic agents.

It was concluded that muscarinic receptors do correlate with clinical symptoms in detrusor overactivity and painful bladder syndrome. M2 and M3 immunoreactivity correlates with urinary frequency and only M2 significantly correlates with urgency.

More abstracts that you may find interesting to look up in the ICS abstract database are:

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Effects of suplatast tosilate, an anti-allergy agent, on bladder pain response on conscious rat model of HCL-induced chronic cystitis.

Nakano K, Orimoto N, Kirimoto T, Kiniwa M, Oka T.

221

Molecular basis of urgency: vanilloid receptor expression in the human bladder.

Millard RJ, Liu L, Mansfield KJ, Burcher E.

237

Hypnotherapy for the treatment of chronic pelvic pain

Doggweiler R.

238.

Urinary ATP is the predictive marker for the effect of hydrodistension in the interstitial cystitis patient.

Yamamoto K, Takao T, Kiuchi H, Miyagawa Y, Takada S, Tsujimura A, Noma M, Fukumoto Y, Yamanaka M, Takeyama M, Okuyama A.

239

Vascular endothelial growth factor (VEGF) up-regulation in severe interstitial cystitis.

Kiuchi H, Takao T, Miyagawa Y, Takada S, Tsujimura A, Yamamoto K, Fukumoto Y, Yamanaka M, Takeyama M, Okuyama A.

241

The effect of DMSO on bladder inflammation after protamine sulfate instillation and on normal bladder mucosa.

Soler R, Bruschini H, Truzzi JC, Alves MT, Pimentel LG, Camara NO, Martins JR, Leite KR, Nader J, Ortiz V, Srougi M.

252

Local application with suplatast tosilate improves bladder dysfunction and suppresses afferent nerve activity in chemical-induced cystitis rats.

Orimoto N, Kirimoto T, Nakano K, Hayashi Y, Kiniwa M, Oka T.

260

Muscarinic and purinergic receptors are altered in the bladder of rat models with interstitial cystitis.

Kageyama A, Oki T, Luvsandorj O, Kurosawa S, Yamada S.

267

Type 4 phosphodiesterase inhibitor shows anti-inflammatory effects and reduces urinary frequency in the hydrochloride induced interstitial cystitis rat model.

Kitta T, Tanaka H, Sano H, Furono T, Mitsui T, Morya K, Nonomura K.

398

Initial treatment patterns of interstitial cystitis/painful bladder syndrome within the first 30 or 365 days after diagnosis: a large population-based study.

Stanford EJ, Sand PK, Aquilina JW, Wan GJ.

399

Evaluation of symptom and problem index in painful bladder syndrome.

Hanus T, Zamecnik L, Pavlik I.

400

The effect of intravesical dimethyl sulfoxide for interstitial cystitis after hydrodistension.

Tomoe H, Maeda Y, Kobayashi H, Nakazawa H.

401

Reduction in symptoms is associated with improved sexual functioning and sleep in patients with interstitial cystitis/painful bladder syndrome.

Wan GJ, Creanga DL, Nickel JC.

405

Physical and psychological complexity in patients with interstitial cystitis warrants a multidisciplinary approach to care.

Carr LK, Liu M, McGuire A, Steele D, Pron G.

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Pain characteristics of women with interstitial cystitis (IC).

Carr LK, Liu M, McGuire A, Steele D, Pron G.

414

Voiding dysfunction symptoms relief by pelvic floor stimulation.

De Jong P, Radziszewski P, Chapple C, Borkowski A, Cervigni M, Parsons M, Cardozo L, Farnsworth B, Nordling J, O'Connell H, Rosamilia A, Nissenkorn I.

ICS Abstract database and webcast link

A searchable database of abstracts is available on the ICS website www.icsoffice.org. Click on Abstracts on the home page. You will also find the titles and authors of all scientific presentations in Christchurch here and a link to the webcasts.

The webcasts can also be accessed via http://webcasts.prousonline.com/ics2006_nz/.

Next stop ... Rotterdam

The next annual conference of the International Continence Society 20-24 August 2007 will be held nearer home: in fact virtually right on the doorstep of the IPBF HQ in Rotterdam, the Netherlands! Tot ziens!