

REVIEW OF THE INTERNATIONAL CONTINENCE SOCIETY

47th ANNUAL SCIENTIFIC MEETING 2017

12-15 September, Florence, Italy.

Programme and downloads: www.ics.org/2017/programme

The 47th annual scientific meeting of the International Continence Society (ICS) was held at Fortezza da Basso in the ancient and beautiful Italian city of Florence. It was good to see that the 2,766 delegates included a number of patient representatives. For all of us in the IC/BPS and chronic pelvic pain/hypersensitivity special interest group, the ICS annual meeting has become increasingly important not only as an invaluable source of information about new developments and insights, but also as a discussion forum.

IPBF CHAIR COMPLETES TERM ON ICS STANDARDISATION STEERING COMMITTEE AS PATIENT REPRESENTATIVE



The meeting in Florence was a special moment for IPBF chair Jane Meijlink since she retired after completion of her maximum term (9 years) on the ICS Standardisation Steering Committee as patient representative. She was presented with a certificate of appreciation by Dr Bernie Haylen, chair of the ICS Standardisation Steering Committee. Jane said she was very grateful to the ICS for allowing her this unique opportunity to learn so much about standardisation. This has helped a great deal in her work for the patient movement. She would like to

encourage other patient representatives to get involved. Inaccurate names, definitions and diagnostic criteria can cause multiple problems for patients, including non-reimbursement of treatment. The IC/BPS patient world has certainly experienced this first-hand. With increasing use of electronic systems and coding, it is now vital that patient representatives understand what standardisation is all about, realize why it is important to know how it works and that they should be fully involved in developments and changes.

STATE-OF-THE-ART PRESENTATION: WEBSITE, APPS AND SOCIAL MEDIA: ARE PATIENTS AHEAD OF THE PROFESSION?

In this state-of-the-art presentation, Professor Eva Samuelsson from Sweden discussed a topic that concerns us all. The rise of the internet as a source of health information has made huge changes in health and healthcare. We live in a time of increasing patient empowerment and better educated patients who want to be more involved in their own health and decision making. While social media have brought new possibilities for patients to discuss health and medical problems, it can also lead to patients being misinformed. However, while the global mobile boom has resulted in a surge in health apps, few of them are being scientifically evaluated. Online health information and medical apps have the potential to help lower barriers, increase access to care and self-management programmes, also for pelvic floor disorders. All of this can also increase patient empowerment. There is a great demand for eHealth solutions from patients and caregivers but what do we know about the use, the effectiveness and the costs? Are we ready?

Professor Samuelsson drew our attention to the report on the 3rd global survey on eHealth, Global Diffusion of eHealth: making universal health coverage achievable, published December 2016 by the World Health Organization. The aim of the third global survey on eHealth was to explore developments in eHealth since the last survey in 2010 and the role it plays in achieving universal health coverage (UHC).

For those who are interested, go to http://www.who.int/goe/publications/global_diffusion/en for more information. The report can be downloaded at:

<http://apps.who.int/iris/bitstream/10665/252529/1/9789241511780-eng.pdf?ua=1>

The survey was divided into eight thematic subjects, each offering its own perspective on the contribution of eHealth to UHC: eHealth foundations, mHealth (mobile health), Telehealth (the practice of medicine at a distance), eLearning in health sciences, Electronic health records, Legal frameworks for eHealth, Social media and Big data.

The speaker reviewed a number of interesting articles in this field:

Lee K, Hoti K, Hughes JD, Emmerton L. [Dr Google Is Here to Stay but Health Care Professionals Are Still Valued: An Analysis of Health Care Consumers' Internet Navigation Support Preferences.](#) J Med Internet Res. 2017 Jun 14;19(6):e210. doi: 10.2196/jmir.7489.

This study explored consumer-perceived barriers to navigating desired Web-based health information and consumers' navigational support preferences. Their findings identified that the volume of available information and the inconsistency of information obtained from different information sources were the most commonly identified barriers. Despite concerns that the Internet and consumer sovereignty could negatively impact the relationships between health care consumers and health care professionals, the authors are of the opinion that their findings suggest the contrary, as health care professionals were reported as the most commonly selected option for providing navigational support. They suggest that further exploration of how health care professionals could assist consumers with their Web-based health information-seeking could see the strengthening of this relationship amidst the growing use of the Internet for obtaining health information.

Tan SS, Goonawardene N. [Internet Health Information Seeking and the Patient-Physician Relationship: A Systematic Review.](#) J Med Internet Res. 2017 Jan 19;19(1):e9.

With online health information becoming increasingly popular among patients, concerns have been raised about the impact of patients' Internet health information-seeking behaviour on their relationship with physicians. Therefore, it is pertinent to understand the influence of online health information on the patient-physician relationship. The authors' main findings show that Internet health information seeking can improve the patient-physician relationship depending on whether the patient discusses the information with the physician and on their prior relationship. As patients have better access to health information through the Internet and expect to be more engaged in health decision making, traditional models of the patient-provider relationship and communication strategies must be revisited.

[Comment: We ourselves have seen considerable interest from East Asia in the field of IC/BPS including the following article:

Lee MH, Wu HC, Lin JY, Tan TH, Chan PC, Chen YF. [Development and evaluation of an E-health system to care for patients with bladder pain syndrome/interstitial cystitis.](#) Int J Urol. 2014 Apr;21 Suppl 1:62-8. doi: 10.1111/iju.12336.]

It was emphasized by the speaker that excellent information can now be found on the web. Furthermore, online blogs and forums have encouraged patients to discuss incontinence/urogenital issues more freely than they might face to face.

While not all people are yet e-literate, this will come very soon, said the speaker. While there is a mass of information online, some is biased or inaccurate. Research is needed into apps.

In summary:

- Effectiveness and cost-effectiveness? So far there is limited evidence.
- eHealth has the potential to increase prevention actions, self-management and access to care.
- People want more and better information on the Internet
- Validated tools exist to assess the quality of patient information online
- People want to communicate regarding health on social media. However, privacy issues need to be taken into account.
- Regulation of mHealth needed to increase quality, security and integrity.

This presentation gave much food for thought. Are we paying enough attention to this in the IC/BPS world? Is there sufficient quality control in place for the apps which are now mushrooming?

WORKSHOP 13: PHENOTYPING BPS/IC FOR SUCCESS

Chair: Christopher Payne, MD, Speakers: Mauro Cervigni, MD, Magnus Fall, MD, Jane Meijlink (IPBF)
www.ics.org/2017/session/2839 (handout and slides can be accessed here)

“Let's not pretend that things will change if we keep doing the same things.....” Albert Einstein

This workshop was one of the IC/BPS highlights of the meeting with **Professor Christopher Payne** asking why has so little progress been made after decades of research in Bladder Pain Syndrome/Interstitial Cystitis (BPS/IC)? Many hundreds of research projects costing tens of millions of dollars have come and gone, but patient care is little improved. It is still largely trial & error and consequently the long-suffering patient has suffered even more. We argue here at this workshop, he said, that the mistake has been in creating a large group of patients with similar symptoms but nothing else in common. This workshop aimed to present a new approach to the problem: rather than lumping different patients together, work to identify useful patient phenotypes appropriate for research and specific clinical pathways. The presentations put forward proposals for clinically relevant phenotypes, while not claiming that these are completely accurate or comprehensive, but rather a starting point from which to gain a more complete understanding of these patients. The workshop should be seen as a call to action, said Professor Payne.

Professor Payne proposed that:

- there are identifiable phenotypes
- researching more homogeneous groups of patients (specific phenotypes) will produce useful results
- treatment algorithms aimed at specific phenotypes will be much more useful/successful than current documents

A basic phenotype, he said, could be the Bladder Phenotype when patients only have a bladder problem and no comorbidities at all, with pain on bladder filling relieved by urination, consistently reduced urine volumes on diary, primarily bladder tenderness on examination, and pain relief with intravesical lidocaine

Hunner lesions

Professor Magnus Fall explained that classic interstitial cystitis with Hunner lesions is a distinctive and well-defined entity and should be dealt with accordingly. Identification has decisive consequences for the patient. It appears that Hunner lesions are more common than originally thought, he said emphasizing that lesion and non-lesion disease should be separated. He recommended making Hunner lesion not just a phenotype, but preferably a separate identifiable bladder disease.

Myofascial pelvic pain phenotype

Professor Mauro Cervigni looked at pelvic floor dysfunction with a view to a potential myofascial pelvic pain (MPP) phenotype. It was nevertheless emphasized that there remain many more questions than answers in defining this as a phenotype.

IC/BPS patients with a significant myofascial component to their pelvic pain will often report leg or groin pain that occurs with bladder filling and urinary frequency that is severe during the day but not at night. The “pressure” arising from the pelvic floor hypertonicity is perceived as a need to void but during sleep the pelvic floor relaxes, therefore the need to void is generated only by bladder volume and not by the pelvic floor.

(Butrick et al. 2005 Int Urogyn J 2009;20:1047–53)

A trigger-point is a hyperirritable spot in skeletal muscle that is associated with a hypersensitive palpable nodule in a taut band. The spot is painful on compression and can give rise to characteristic referred pain, referred tenderness, motor dysfunction, and autonomic phenomena.

On international examination it consists of discrete, focal, hypersensitive spots located in a taut band of skeletal muscle. They produce pain locally and in a referred pattern and often accompany chronic musculoskeletal disorders.

(Travell, Janet; Simons David; Simons Lois (1999). Myofascial Pain and Dysfunction: The Trigger Point Manual (2 vol. set, 2nd Ed.). USA: Lippincott Williams & Williams)

Treatments for pelvic floor dysfunction include: behavioural modification, physical therapy, trigger point injection, pharmacologic therapy, neuromodulation.

Professor Cervigni concluded that IC/BPS is associated with other “unexplained enigmatic” medical conditions, likely through neurogenically mediated mechanisms. An understanding of the pathophysiology of phenotypic initiation and progression requires more research.

He underlined that it impacts our Diagnostic and Management Algorithm. Early Diagnosis is important, other associated conditions should be identified – IBS, VV, PFD, FM, CFS etc, thereby enabling the unique clinical phenotype of each patient to be managed.

Central Sensitization

Professor Christopher Payne then addressed central sensitization. Pain is inherently a neurological phenomenon. He suggested that a large number of disorders previously assigned to an organ system may actually be related Central Sensitization Syndromes:

- No identifiable organ abnormality
- Common neurological abnormalities

Above all, he emphasized:

Replace pejorative “it’s all in your head” with logical “it’s a complex neurological disorder”.

Autoimmune, Multiple Sensitivity and Central Sensitization Potential Phenotypes

Jane Meijlink (IPBF chair) then discussed Autoimmune, Multiple Sensitivity and Central Sensitization Potential Phenotypes, stressing that while there has not yet been enough research and scientific evidence to “officially define” these potential phenotypes, there is every unofficial reason to take a specially tailored multidisciplinary approach when treating patients with IC/BPS and one or more comorbidity phenotypes.

Patients with chronic pelvic pain syndromes have a higher prevalence of one or multiple comorbid syndromes and diseases than the general population. These include:

- Allergies or non-allergic intolerances/hypersensitivities
- chronic pain syndromes,
- chronic fatigue syndromes

- systemic autoimmune diseases.

The ICS Standard for Terminology in Chronic Pelvic Pain Syndromes notes that: Systemic autoimmune diseases are a heterogeneous group of diseases with multi-organ and multi-system involvement and evidence indicating a role played by the immune system.

(Doggweiler et al. A standard for terminology in chronic pelvic pain syndromes: A report from the chronic pelvic pain working group of the International Continence Society. Neurourol Urodyn. 2017 Apr;36(4):984-1008. doi: 10.1002/nau.23072. Epub 2016 Aug 26.)

Some of these diseases are inflammatory, many are not and some manifest themselves in either inflammatory or non-inflammatory forms. The cause of these diseases is unknown and diagnoses often uncertain. Currently, these diseases are not curable. A few of the most common examples are Systemic Lupus Erythematosus (SLE), Sjögren's syndrome, and Rheumatoid Arthritis (RA). Many patients can be diagnosed with more than one of these diseases, or plus fibromyalgia and IBS. So, you can have a patient with multiple conditions. Chronic fatigue is a common feature and can be severely disabling. Never underestimate its effect. Like IC/BPS, these diseases are exacerbated by stress and can flare.

While SLE and RA are relatively easily diagnosed by experienced clinicians, Sjögren's is probably greatly underdiagnosed, and due to overlapping symptoms may occur unrecognized in patients with SLE and RA, or may be misdiagnosed as these diseases. However, a strong correlation has been shown between Sjögren's and IC/BPS. Many of the disorders found in Sjögren's can also exist as separate diseases, such as the characteristic abnormalities in tear and salivary glands. If only these symptoms are present, and no other disorders, patients are classified as having Sicca Syndrome and not Sjögren's syndrome. Some IC/BPS patients may fail to be diagnosed with Sjögren's because they do not meet the full official criteria and may have only 3 out of the 4 criteria required. This has led to a diagnosis of a Sjögren's-like syndrome also known as Incomplete Sjögren's syndrome. This should not be confused with Sicca Syndrome. Sometimes Sjögren's-like is diagnosed as Undifferentiated Connective Tissue Disease (UCTD). The same diagnosis applies to other systemic autoimmune diseases when not all criteria are met.

(Van De Merwe JP, Arendsen HJ. Interstitial cystitis: a review of immunological aspects of the aetiology and pathogenesis, with a hypothesis. BJU Int. 2000 May;85(8):995-9.

Van de Merwe JP, Yamada T, Sakamoto Y: Systemic aspects of interstitial cystitis, immunology and linkage with autoimmune disorders. Int J Urol 2003, 10 Suppl:S35-38.

Sjögren's syndrome - information for patients and professionals by Dr Joop P van de Merwe, online at: http://www.painful-bladder.org/pbs_ic_ass_dis.html)

Questions to consider:

- Is the IC/BPS a consequence of the systemic autoimmune disease and part of the disease?
- Or is this IC/BPS (subtype) a separate organ-specific autoimmune disease?
- Or do both exist.

Well, like so many other questions, we don't yet know the answer.

For optimal treatment, comorbid autoimmune diseases should be diagnosed and treated by the appropriate specialists working as a multidisciplinary team with the urologist. It sounds simple, but in practice it's complex and you don't often find it working optimally, and sometimes not at all.

When treating each comorbid disease, it's essential to remember that an individual IC/BPS patient may not only have one or more autoimmune diseases, but also other pain syndromes, neurological disorders, allergies, etc., all of which must be taken into account.

Another important potential phenotype is the one termed **Multiple Sensitivity Phenotype** by Fuoco et al in Canada. This term covers allergies and non-allergic intolerances or hypersensitivities.

(Fuoco MB, Irvine-Bird K, Nickel JC. Multiple sensitivity phenotype in interstitial cystitis/bladder pain syndrome. Can Urol Assoc J. 2014 Nov;8(11-12):E758-61)

The Canadians noted that their IC/BPS database included patients who seemed to have an inordinate number of allergies and sensitivities, whereas others had either no allergies or very few. They carried out a pilot study and have characterized a distinct phenotypic group of patients with IC/BPS and multiple sensitivities. But more research is needed. Allergies have been commonly associated with IC/BPS for decades, while mast cells and mast cell activation have long been a topic of interest. True allergies can be identified by tests. Non-allergic intolerances are more difficult to establish and may ultimately be a question of trial and error. IC/BPS patients may have either true allergies or non-allergic intolerances or a mixture of both.

However, big problems arise with **multiple drug intolerance**. And interestingly this is also found in fibromyalgia patients. Non-allergic reactions to drugs can be difficult to distinguish from true allergic reactions. Drug intolerance may affect, for example, cognitive functioning, eyesight and balance and cause dizziness, faintness, headache, fatigue, extreme drowsiness, gastrointestinal disorders and even shock. This makes treatment very difficult in these patients since reactions to drugs may be unpredictable, variable and multiple. A patient with this problem can become very desperate, and very nervous about trying new drugs, and naturally very depressed about what the future may bring. While some patients may get an immediate strong reaction, in others the reaction may worsen dose by dose, ultimately reaching an intolerable level. This process may happen either slowly or very quickly. Intravesical treatment may be the best option for the bladder aspect in these patients since it goes straight to the bladder without passing through the rest of the body.

While everyone is talking about **central sensitization** these days, they all appear to have different ideas about what this means. In clinical terms, we are talking about patients with several or multiple chronic pain syndromes. So, we could call it a Multiple Chronic Pain Syndromes Phenotype!

The ICS grouped Chronic Pain and Fatigue Syndromes together in its CPPS standardisation document. These syndromes are characterized by often widespread pain; fatigue; sleep disturbances; and disability. The symptoms are usually medically unexplained, have no known pathophysiology or organic basis and show no abnormal laboratory or imaging investigations. The literature suggests that many of these conditions share demographic characteristics, clinical course and psychosocial profiles. In practical terms, IC/BPS patients may have several pain disorders affecting their whole body as well as the bladder. Systemic pain treatment may work in some, but may make others very sick indeed, and this is not going to improve their quality of life. In these cases, you probably need to combine milder systemic pain treatment plus intravesical treatment. Because we should never forget that IC/BPS patients have bladder pain plus urgency plus frequency.

Treatment of the bladder itself may then at least provide alleviation of these symptoms, regardless of any central sensitization hypothesis. We should not lose sight of this aspect, because the patient's quality of life should be paramount. All specialists involved need to take all the other conditions fully into account. However, treatment is always going to be individual since not only are IC/BPS patients all different, but patients with systemic autoimmune diseases, chronic pain syndromes, chronic fatigue syndromes and allergies are also all different. But maybe we can narrow down the trial and error approach by using the phenotype concept. A very flexible approach to guidelines is needed. And maybe we need special treatment guidelines per phenotype and/or per combination of overlapping phenotypes, that could be used as a reference by all the specialists involved.

Above all, remember that drug intolerance can put a spanner in the works of even the best treatment guideline.

WORKSHOP 24: PUDENDAL NEURALGIA AND OTHER INTRAPELVIC PERIPHERAL NERVE ENTRAPMENT- A NEGLECTED CAUSE OF PAIN AND PELVIC FLOOR DYSFUNCTION

Handout with slides: <https://www.ics.org/Workshops/HandoutFiles/000738.pdf>

WORKSHOP 31: ICS CORE CURRICULUM (FREE): WIKI WHAT? - BE A PART OF THE FUTURE OF ICS AND UROLOGY TERMS

<https://www.ics.org/2017/session/2864>

Handout and slides: <https://www.ics.org/Workshops/HandoutFiles/000694.pdf>

PAIN AND THE PELVIC FLOOR ROUND TABLE DISCUSSION SESSION

Chair Francisco Cruz. Speakers: Lori Birder, Nucleio Lemos, Naoki Yoshimura, Kari Bø, Larissa Rodriguez.

<https://www.ics.org/2017/session/2894>

This session looked at the impact of chronic stress and correlation with duration of bladder pain, mechanisms underlying autonomic response to stress in chronic bladder pain, chronic pelvic floor pain: evidence for pelvic floor muscle training, somatic nerves of the pelvis and their relation to pelvic and perineal pain.

Below we have a selection of podium presented abstracts that may be of interest with links to the abstract text.

BEST BASIC SCIENCE SCIENTIFIC PODIUM SESSION S5

<https://www.ics.org/2017/session/2907>

[#43 MIND-BODY INTERACTIONS: AUTONOMIC AND MITOCHONDRIAL DYSREGULATION PLAY KEY ROLES IN PBS/IC](#)

Prize Award: Best non-clinical abstract

[#46 URETHRAL SEROTONERGIC PARANEURONS PLAY KEY ROLE IN URETHRAL INSTABILITY AND PAIN](#)

Prize Award: best in category prize – urethra male/female

FEMALE PELVIC MEDICINE SCIENTIFIC PODIUM SHORT ORAL SESSION S12

[#234 BACTERIAL VIRUSES IN THE FEMALE URINARY MICROBIOME](#)

[#235 THE FEMALE URINARY MICROBIOTA DIFFER BY PRIMARY LOWER URINARY TRACT DISORDER](#)

[#245 EB VIRUS IN INTERSTITIAL CYSTITIS/BLADDER PAIN SYNDROME – AN IMMUNOCHEMICAL STUDY](#)

FEMALE PELVIC FLOOR 2 SCIENTIFIC PODIUM SHORT ORAL SESSION S16

[#286 A SYSTEMATIC REVIEW: THE EVIDENCE FOR CYSTODISTENSION IN PAINFUL BLADDER SYNDROME/INTERSTITIAL CYSTITIS](#)

PELVIC PAIN SCIENTIFIC PODIUM SHORT ORAL SESSION S13:

<https://www.ics.org/2017/session/2925>

[#246 EXPRESSION PROFILE OF UROTHELIAL TRANSCRIPTION FACTORS IN BLADDER BIOPSIES WITH INTERSTITIAL CYSTITIS](#)

[#248 INTRAPELVIC NERVE ENTRAPMENT AS A CAUSE OF PELVIC FLOOR DYSFUCTION AND REFRACTORY PUDENDAL PAIN: A REVIEW OF 50 CASES](#)

[#249 NEUROTROPHIN AND FIBROGENESIS CYTOKINES EXPRESSION IN KETAMINE CYSTITIS BLADDERS – CORRELATION WITH CLINICAL CHARACTERISTICS](#)

[#250 THERAPEUTIC EFFECTS OF TRPV1TARGETING GENE THERAPY ON BLADDER OVERACTIVITY AND NOCICEPTION IN A RAT MODEL OF EXPERIMENTAL COLITIS](#)

[#251 SIGNIFICANCE OF C-REACTIVE PROTEIN AN INFLAMMATORY MARKER IN INTERSTITIAL CYSTITIS](#)

[#253 KETAMINE ACTIVATE OF THE MTOR DEPENDENT SIGNALING PATHWAY IN THE ENDOTHELIAL INJURY OF KETAMINE CYSTITIS](#)

[#255 PATHOPHYSIOLOGY OF EXPERIMENTAL CYSTITIS: ROLE OF TOLL LIKE RECEPTOR 4 \(TLR4\)](#)

[#256 BOTULINUM TOXIN A FOR THE TREATMENT OF BLADDER PAIN SYNDROME \(BPS\): A SYSTEMATIC REVIEW](#)

PAEDIATRICS, PAIN AND NEUROGENIC DYSFUNCTION SCIENTIFIC PODIUM SHORT ORAL SESSION S21

[#455 INCREASE IN SPINAL FLUID LEVEL OF NEUROGENIC PAIN-RELATED LYSOPHOSPHATIDYLCHOLINES IN HUNNER TYPE INTERSTITIAL CYSTITIS](#)

[#456 PREDICTIVE FACTOR FOR CONTRACTED BLADDER AS AN END STAGE HUNNER TYPE INTERSTITIAL CYSTITIS](#)

FEMALE LOWER URINARY TRACT SYMPTOMS 2 SCIENTIFIC PODIUM SHORT ORAL SESSION S30

[#529 A COHORT STUDY OF CAESAREAN SECTION AND INTERSTITIAL CYSTITIS/BLADDER](#)

NEUROMODULATION AND INTRAVESICAL THERAPIES SCIENTIFIC PODIUM SHORT ORAL SESSION S32

[#550 NEUROMODULATION IN CHRONIC PELVIC PAIN: A SYSTEMATIC REVIEW](#)

[#551 A RANDOMIZED CONTROL TRIAL ON INTRAVESICAL INSTILLATION OF HEPARIN ALONE VERSUS A COCKTAIL OF HEPARIN PLUS ALKALIZED LIDOCAINE FOR REFRACTORY INTERSTITIAL CYSTITIS](#)

[#552 COMPARATIVE STUDY OF INTRAVESICAL ONABOTULINUMTOXINA INJECTION FOR INTERSTITIAL CYSTITIS/BLADDER PAIN SYNDROME – BLADDER BODY VERSUS TRIGONAL INJECTION](#)

[#553 INTRAVESICAL INJECTIONS OF PLATELET-RICH PLASMA \(PRP\) IN TREATMENT OF INTERSTITIAL CYSTITIS REFRACTORY TO CONVENTIONAL TREATMENT – A PILOT STUDY](#)

[#554 A COMPARISON OF TWO INTRAVESICAL BLADDER INSTILLATIONS FOR INTERSTITIAL CYSTITIS/BLADDER PAIN SYNDROME](#)

PRIZE AWARD: Best in Category Prize - Pelvic Pain Syndromes / Sexual Dysfunction

BASIC SCIENCE 3 SCIENTIFIC PODIUM SHORT ORAL SESSION S34

[#571 INVOLVEMENT OF TRANSIENT RECEPTOR POTENTIAL ANKYRIN 1 \(TRPA1\) IN THE INFLAMMATORY BLADDER HYPERSENSITIVITY CAUSED BY INTRAVESICAL LIPOPOLYSACCHARIDE \(LPS\) IN MICE](#)

FEMALE LOWER URINARY TRACT SYMPTOMS AND NEUROUROLOGY SCIENTIFIC PODIUM SHORT ORAL SESSION S36

[#709 COMPARISON OF INFLAMMATORY URINE MARKERS IN PATIENTS WITH INTERSTITIAL CYSTITIS AND OVERACTIVE BLADDER](#)

[#711 PATIENT FACTORS AND RESPONSE TO BLADDER HYDRODISTENTION IN INTERSTITIAL CYSTITIS/BLADDER PAIN SYNDROME ARE PREDICTIVE OF SUCCESS OF FOURTH LEVEL THERAPY](#)

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