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MAY 12-16

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World Chinese Urological Society (WCUS)

International Society

Holistic Approach by Bio-Psycho-Social model to Patients with Interstitial Cystitis / Bladder Pain Syndrome

📅 Friday, May 12 ⌚ 1:43 PM - 1:51 PM 📍 Location: BCEC: Room 104



Holistic Approach by Bio-Psycho-Social model to Patients with Interstitial Cystitis / Bladder Pain Syndrome

Ming-Huei Lee, M.D., M.H.A

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²*Central Taiwan University of Science and Technology, Taiwan*

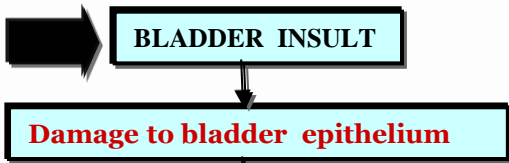
2017-05-12 AUA-Boston



Hypothesis of etiology in IC/BPS



- Primary neurogenic inflammation??
- Bacterial cystitis??
- Bladder trauma??
- Autoimmune disorder??
- Bladder overdistention??
- Pelvic floor dysfunction??



Leak of urine constituents (potassium) into interstitium

C-fiber activation; substance P release

Mast cell activation and histamine release

Immunogenic and allergic responses



Central sensitization



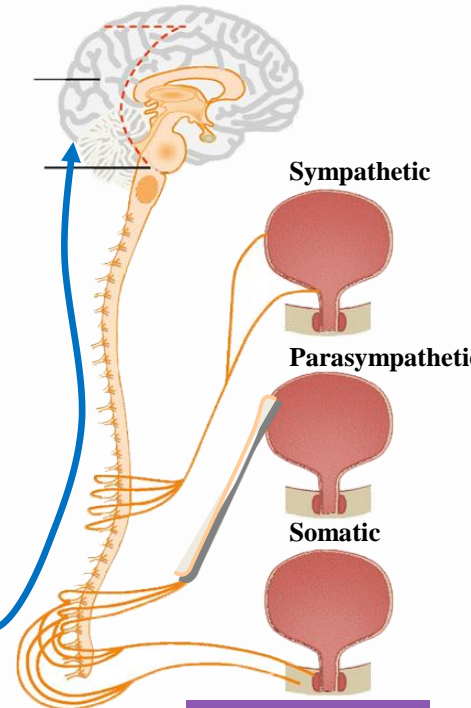
Non-bladder comorbidities

- Chronic fatigue syndrome
- Fibromyalgia
- IBS
- Migraine
- Endometriosis
- Vulvodynia
- SLE
- Sicca syndrome

Abuse History
Anxiety Depression

Inadequate Downward Modulation of pain

Possibility of chronic neuropathic pain



Cross-talk

Autonomic Dysfunction

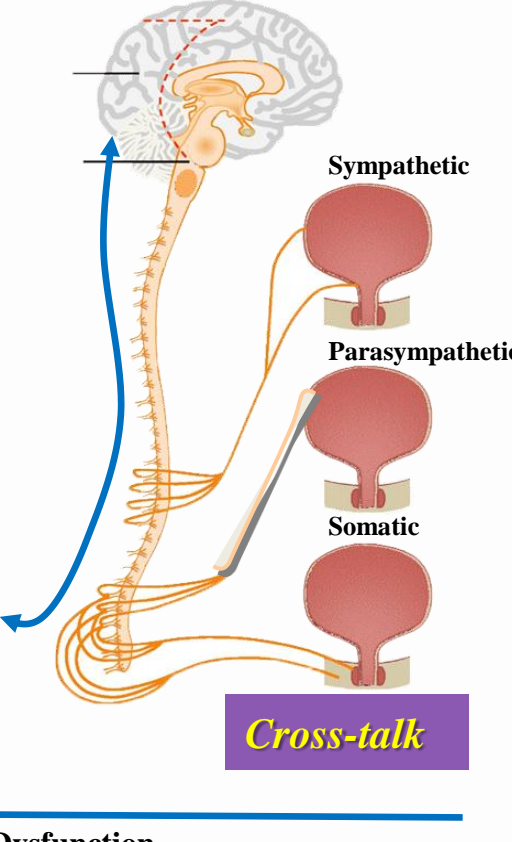
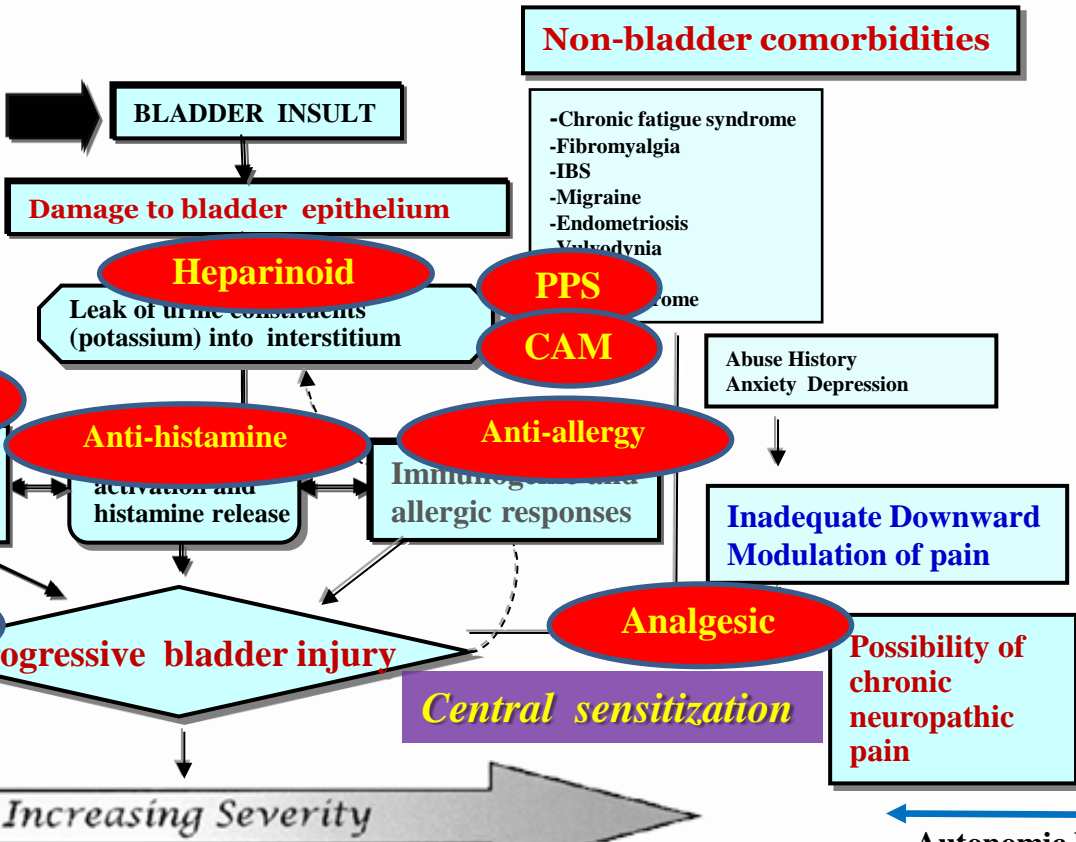
Modified from Dr.Hanno



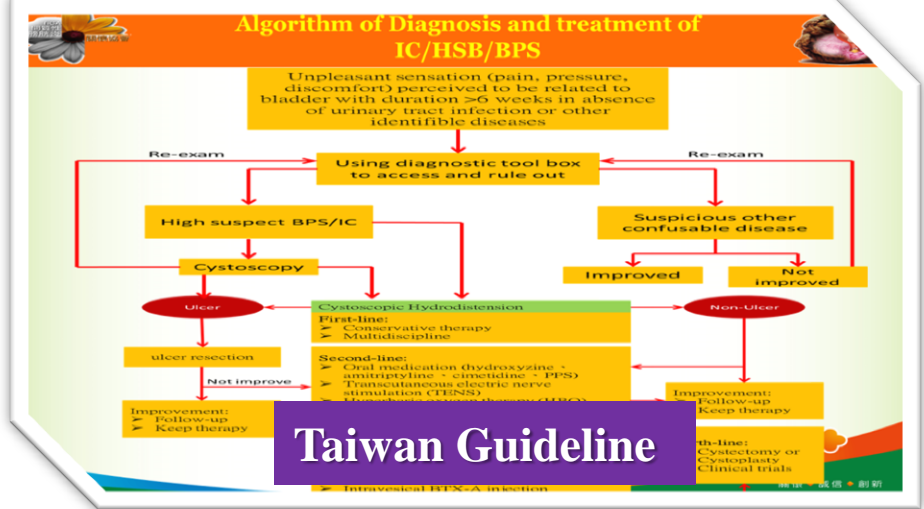
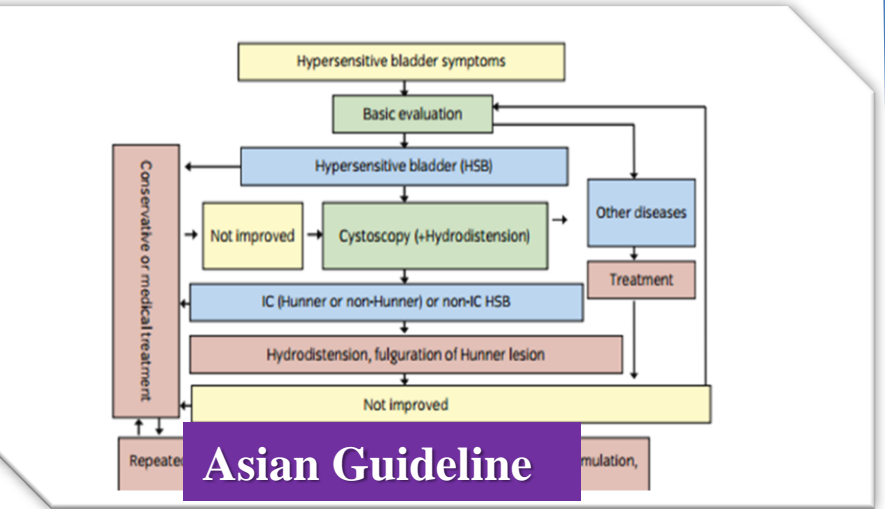
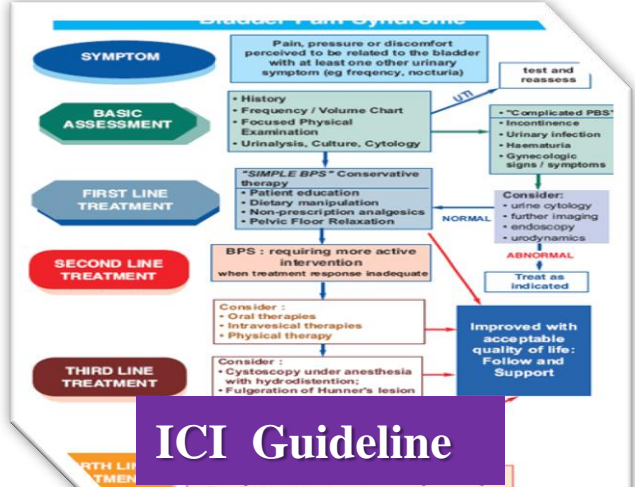
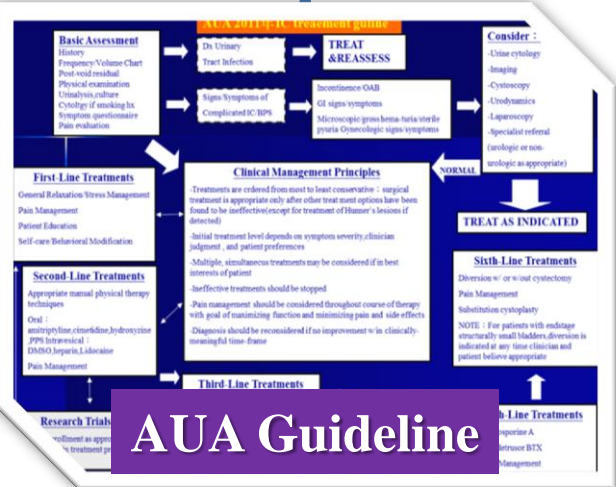
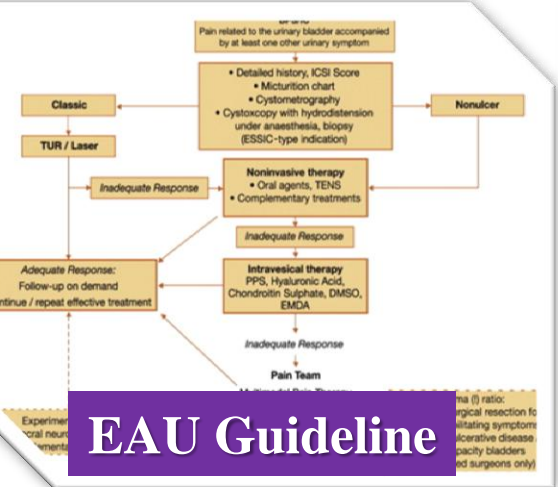
Management algorithm of IC/BPS



- Primary neurogenic
- inflammation??
- Bacterial cystitis??
- Bladder trauma??
- Autoimmune disorder??
- Bladder overdistention??
- Pelvic floor dysfunction??



Modified from Dr.Hanno





Principles of management for IC/BPS



History/ Initial Assessment

- History •Focus physical examination •Voiding diary
- Questionnaire •Urinalysis •Cystoscopy

Initial Treatment(Conservative)

- Patient education •Dietary manipulation
- Nonprescription analgesics •Pelvic floor relaxation

Secondary Assessment & Treatment

- Urodynamics •Cystodilation •CAM
- UB Bx • Intravesical MX

Refractory IC

- Neuromodulation •Pain clinic referral (Narcotic)
- Experiment protocol

Last Resort

- Cystoplasty •Diversion C/S cystectomy

Improved with
acceptable quality
of life:

-Follow up

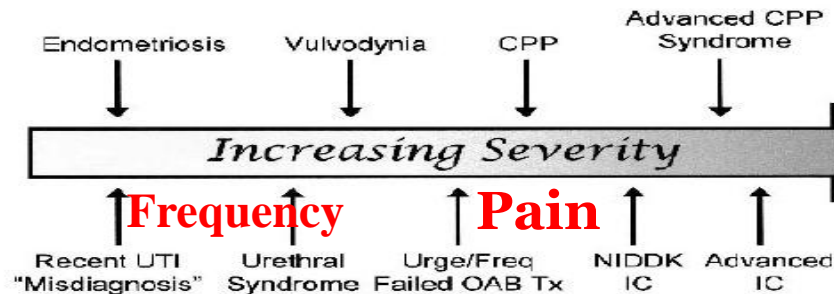
-Support



What drives IC/BPS patients to search for treatment? (patient's view)



Physical Symptoms



Rational(Bio)

What's my problem?
Do I have cancer?
Flare up and down –
Problem behind me?

Emotional (Psycho)

Depression
Anxiety
Somatic
Dissociation

Behavioral(Social)

Relationship stress
Sexual disability
Job performance
Social activity
QoL



The Goal of management IC/BPS from patient's perspective



The Goal of Patient's Perspectives Cure the disease!!

• **Rational (Bio)**

- What's my problem? - Do I have cancer?
- Flare up and down - Problem behind me?

• **Emotional (Psycho)**

- Depression -Anxiety
- Somatic -Dissociation

• **Behavioral (Social)**

- Relationship stress -Sexual disability
- Job performance -Social activity
- QoL

Review Article

Patient-centred standardization in interstitial cystitis/bladder pain syndrome—a PLEA

Jane M. Meijlink

International Painful Bladder Foundation, Rotterdam, the Netherlands

Correspondence to: Jane M. Meijlink. International Painful Bladder Foundation, Rotterdam, the Netherlands. Email: jane-m@dds.nl

Review Article

A **multidisciplinary** approach to the evaluation and management of interstitial cystitis/bladder pain syndrome: an **ideal model of care**

Priyanka Gupta¹, Natalie Gaines¹, Larry T. Sirls^{1,2}, Kenneth M. Peters^{1,2}

Review Article

Complementary and alternative medical therapies for interstitial cystitis: an update from the United States

Megan Danielle Atchley¹, Nima M. Shah², Kristene E. Whitmore³

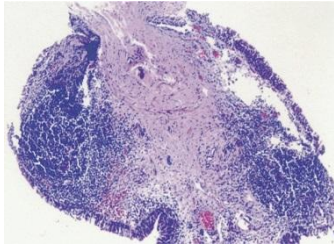


Aspects of effect of urinary bladder and nonbladder on IC/BPS patient (physician's view)



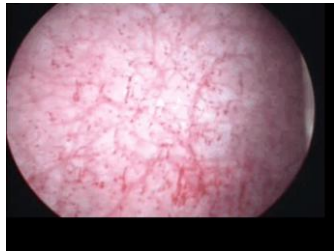
• Patient's own perception

- Symptom scores
- different from physician's perceptions



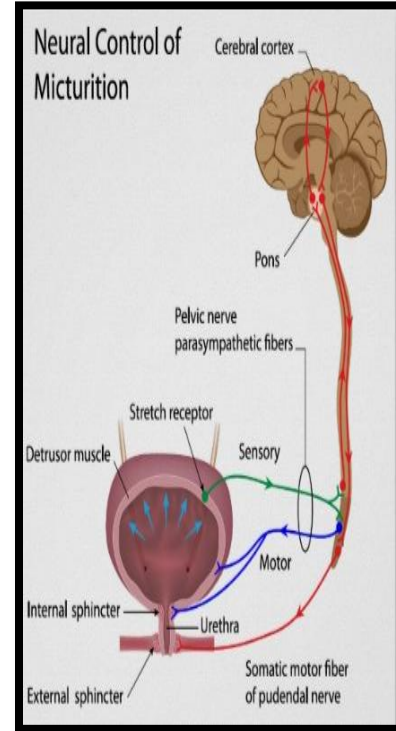
• Disease Damage

- Accumulated over time due to disease itself, or combined conditions
- Results of therapy
- Irreversible change in anatomy, physiology or function



• Disease activity

- provoked by potential factors
- potentially reversible with treatment



FSSs

- TMD
- CFS
- FM
- IBS
- Sicca syndrome

-Migrain

-CPP

-Anxiety

-Depression

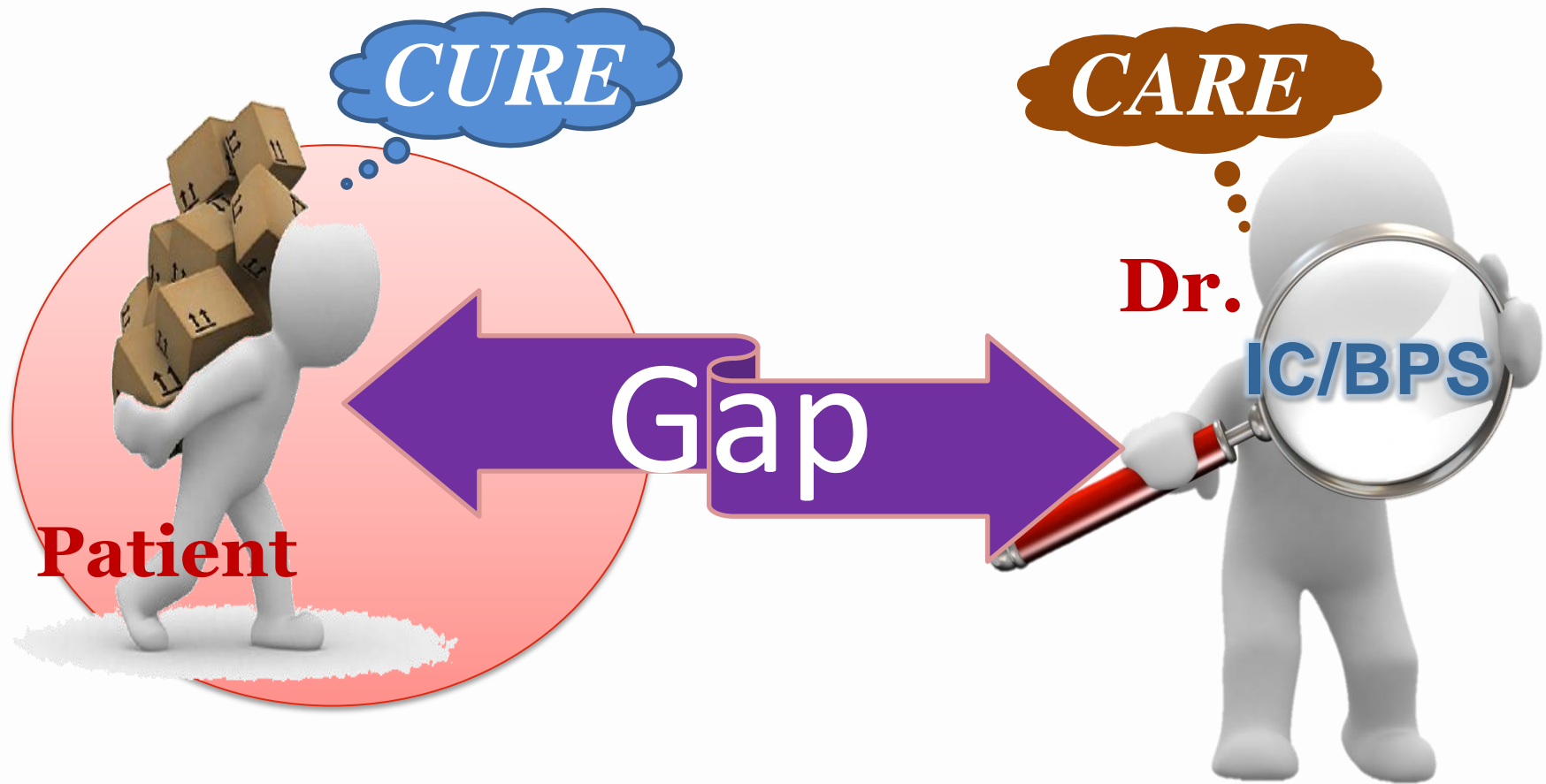
-Allergy

-Asthma

Sultan SM. *Curr Rheumatol Rep* 2003;5:445-50.2

Warren JW. *Urology* 2011,78(4)

Gaps between IC/BPS patients and physicians





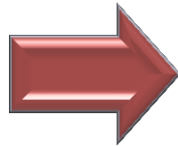
Management the Gaps between IC/BPS Patients and Physicians



Patient's Perspectives

*Cure the disease!

- ◆ Bio-Rational
- ◆ Psycho-Emotional
- ◆ Social-Behavioral



Focus on Patient

- ◆ Organ-oriented approach (Bio)
 - Current main bodily symptoms
 - Focus on dysfunction of peripheral organs
 - Interventions aimed at peripheral physiology and restoration of organ function
- ◆ Cognitive interpersonal approach (Psycho)
 - Pattern of bodily and mental symptoms over time
 - Focus on dysfunction of central processing and context factors
 - Interventions aimed at sensations, cognitions, affects, behaviors, and restoration of overall functioning



Management the Gaps between IC/BPS Patients and Physicians



Physician's Perspectives Care the patients!

Bio medicine

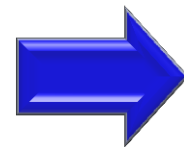
1. Etiology- Multifactorial
2. Diagnosis marker?
3. Treatment guideline!!
4. Co-morbidity
5. Chronicity-flare up and remission
6. Target organ v.s. regional v.s. systemic
(Functional somatic syndrome?)

Psycho medicine

1. Psychotherapy

Social medicine

1. Health care system
2. Culture beliefs



Focus on doctor

- Early recognition
- Avoidance of
iatrogenic harm
- Communication skill



Taiwan

Multidisciplinary IC Team

Algorithm of Taiwan-Lee Model



豐原醫院

Fong-yuan Hospital
Department of Health



Treatment Process of Interstitial Cystitis

There are diverse treatments for interstitial cystitis, but no single one is specific for it. The long-term physical distress could lead to psychological burden, impaired interpersonal and occupational performance, as well as declined quality of life. The multidisciplinary treatment is the best treatment model for these patients.

◎ Outpatient department

- ◆ Physical examination, Initial OPD sheet, 3-days urine diary, symptom-score
- ◆ Urodynamic test (optional)
- ◆ Potassium test (optional)



◎ Inpatient care

- ◆ Cystoscopy, Cystodilation, (local or anesthesia) ;
- ◆ Consultation of gynecologist, psychiatrist, nutritionist, Chinese-medicine, rheumatologist (Referral for psychological consultation, nutritional consultation, Chinese-medicine OPD, rheumatology OPD if indicated)
- ◆ Pelvic floor muscle exercise (biofeedback if indicated)
- ◆ Multidisciplinary-team and patient meeting (Communication of the finding and treatment)



◎ Outpatient follow-up

- ◆ Oral medication, intravesical medication, bladder rehabilitation, nutritional consultation, ... etc.
- ◆ Taiwan International Cystitis Association (TICA)
- ◆ E-health care

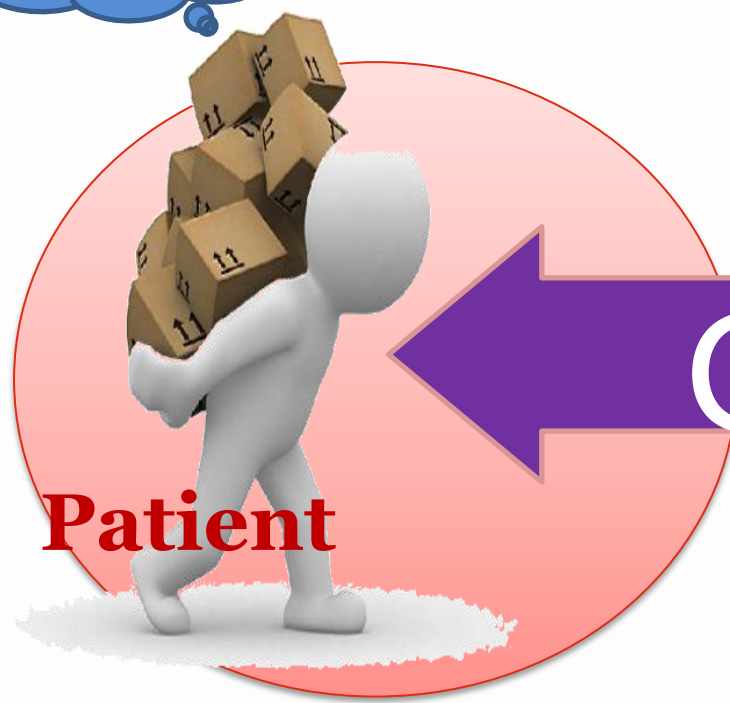


豐原醫院泌尿科與您同行
TICA專線：04-25299123
e-Mail : icatw@mail.taic.doh.gov.tw



CURE

CARE



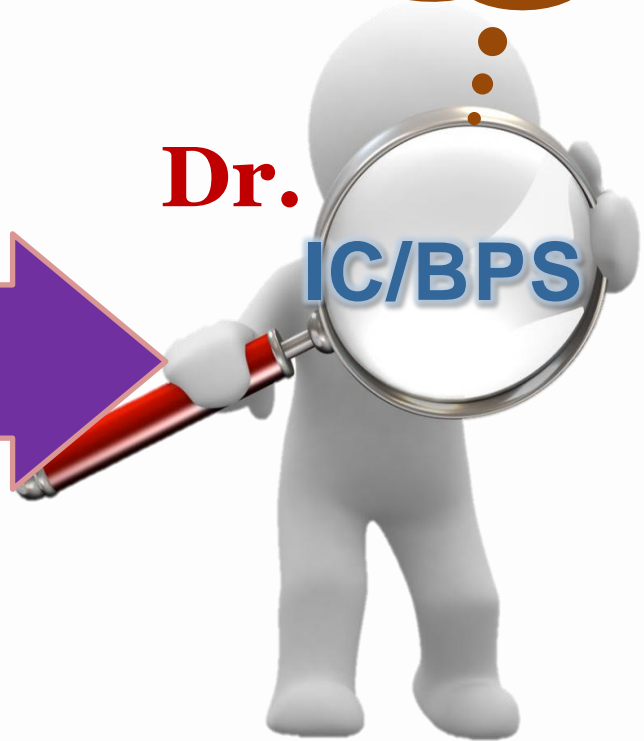
Patient



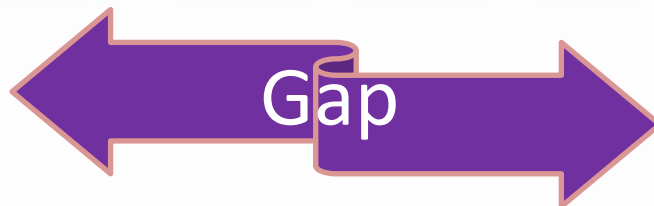
Gap

Dr.

IC/BPS



Communication between IC/BPS patients and physicians





Management the Gaps between IC/BPS Patients and Physicians



Patient's Perspectives *Cure the disease!

Bio-Rational
Psycho-Emotional
Social-Behavioral

Focus on patient

- ◆ **Organ-oriented approach**
 - > Current main bodily symptoms
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- ◆ **Cognitive interpersonal approach**
 - > Pattern of bodily and mental symptoms over time
 - > Focus on dysfunction of central processing and context factors
 - > Interventions aimed at sensations, cognitions, affects, behaviors, and restoration of overall functioning



Focus on doctor

- **Early recognition**
- **Avoidance of iatrogenic harm**
- **Communication skill**

The Physician's Perspectives Care the patients!

Bio medicine

1. Etiology- Multifactorial
2. Diagnosis marker?
3. Treatment guideline!!
4. Co-morbidity
5. Chronicity-flare up and remission
6. Target organ v.s. regional v.s. systemic (Functional somatic syndrome?)

Psycho medicine

1. Psychotherapy

Social medicine

1. Health care system
2. Culture beliefs

Context Factors (Social)

- Support system
- Health-care system
- Cultural beliefs
- Doctor reimbursement system
- Patient compensation schemes



Establishment and Goals of TICA

(Taiwan Interstitial cystitis Association)



TICA established in Dec,2004

Goals of TICA

Educational Goal : Through the aid of doctors and nurse, we would like to provide workshops about medicine and nursing care. We would also like to offer correct knowledge about IC prevention, self-caring, and treatment.

Supportive Goal : Through the help of TICA, we would like to help IC patients and their family relax and adjust to their lives, especially in the aspect of different types of pressure such psychology,emotion, family, and social environment.

Self-help Goal : We integrate experience sharing and emotional assistance to engage patients in mutual concern and encouragement. Finally, IC patients can establish positive perspective of life and can be more able to solve relevant problems.



TICA- Educational Goal



專家學者蒞臨演講 - TCS理事長
台北榮民總醫院 林登龍教授(Alex Lin)



小型聚會活動 - 骨盆底肌肉訓練
中山物理治療系 陳怡靜博士

News reports



Newspapers and magazines



IC press conference





TICA- Support Goal



Original Article

Development and evaluation of an E-health system to care for patients with bladder pain syndrome/interstitial cystitis

Ming-Hsiu Lee,^{1*} Hsi-Ching Wu,^{2,3} Jen-Ying Lin,⁴ Tan-Hsiu Tan,¹ Po-Chou Chan¹ and Yung-Fu Chen^{2,4}

Departments of ¹Management Information System and ²Healthcare Administration, Central Taiwan University of Science and Technology, ³Department of Urology, Feng-Yuan Hospital, Ministry of Health and Welfare, Taichung, ⁴Department of Computer Science and Information Engineering, Da-Yeh University, Changhua, ⁵Department of Electrical Engineering, National Taipei University of Technology, Taipei, and ⁶Department of Health Services Administration, China Medical University, Taichung, Taiwan

Abbreviations & Acronyms
 BPSIC = bladder pain syndrome/interstitial cystitis
 ICT = information and communication technology
 LUTS = lower urinary tract symptoms
 QOL = quality of life
 SF-36 = Short Form 36
 SMS = short message service
 VAS = visual analog scales

Objectives: Bladder pain syndrome/interstitial cystitis (BPSIC) is a chronic disease that highly degrades the quality of life for patients. In the present study, internet intervention was used to care for bladder pain syndrome/interstitial cystitis patients to alleviate their pain and bothering symptoms.

Methods: Healthcare education was carried out through the internet by asking the patients, who were randomly divided into study (40 patients) and control (40 patients) groups, to check possible sensitive foods, habits, and behaviors weekly to remind and consolidate important rules for promoting quality of life. The symptom fares consultation through short message service with the internet used to elevate healthcare efficiency was undertaken. Questionnaires, including Short Form 36 health survey, O'Leary-Saint symptom and problem indices, as well as visual analog scales pain and urgency scales, were used to evaluate quality of life and disease severity improvements before and after information and communication technology intervention. The outcome was evaluated at week 8.

Results: The quality of life of both the control and study groups was significantly improved. The quality of life and visual analog scales for the patients in the study group with information and communication technology intervention showed a much greater improvement compared with the patients in the control group ($P < 0.05$).

Conclusions: The E-health system was shown to be effective in improving quality of life of bladder pain syndrome/interstitial cystitis patients through intervention of internet healthcare education and short message service for the consolidation of healthy behavior and lifestyle in the 8-week follow up.

Key words: bladder pain syndrome, E-health education, information and communication technology, interstitial cystitis, quality of life

Correspondence: Yung-Fu Chen Ph.D., Department of Healthcare Administration, Central Taiwan University of Science and Technology, 666 Bush Road, Beitou District, Taichung 40601, Taiwan. Email: yfchen@ctust.edu.tw
 Received 10 September 2013;



TICA Newsletter



Association website



TICA Facebook

TICA E-health system



TICA- Self-Help Goal



Regular patients gathering



Inpatients Support of IC patients



TICA annual tour (once a year)



TICA annual meeting (once a year)



Achievement of TICA

(Taiwan Interstitial Cystitis Association)



Holistic care

Supporting system

E-health care



Public education

International conference

Guideline

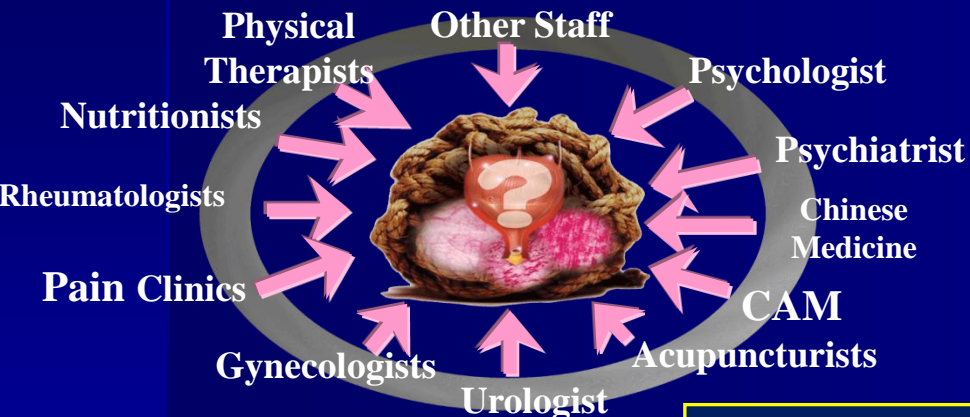




Why holistic management for IC?

- multifocal etiologies
- chronic visceral pain syndromes
(Cross talk vs. Up regulation)
- co-morbidities

- nature histories poor described
- unpredictable treatment outcome
(Wax vs. Wane)
- patients centered care

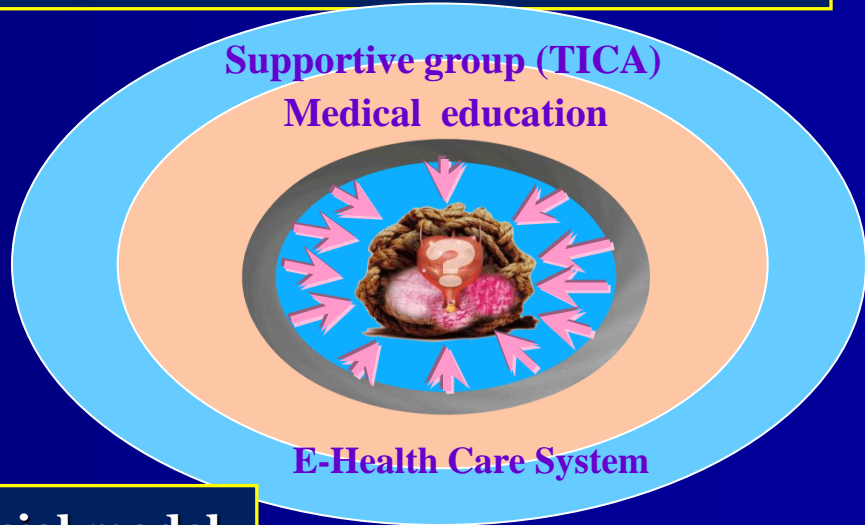


**Multidisciplinary
(Bio-Psycho) Approach**

Bio-psycho-social model



Health promotion



Social Approach

