

出國報告（出國類別：開會）

# 2022 年 ICS 國際尿失禁防治協會年會 參加報告

服務機關：衛生福利部苗栗醫院

姓名職稱：李明輝院長

派赴國家：維也納，奧地利

會議期間：111 年 09 月 05 日至 09 月 12 日

報告日期：111 年 11 月 21 日

# 摘要

經由 ICS 學術活動，除了參與大會講座了解研究新知外，也與各國學者交流拓展台灣外交機會。遠觀各國研究及觀察各國的切入點研究成果，引起深切思考，此次除了增加個人經驗外，更可以藉由許多的專家領域獲得各領域的知識水平，讓我對國際上研究的趨勢、方法、進度、狀況都有深入的認識，而各個相關主題分類可以使相同領域的學者們針對彼此不同的概念、想法做分享，瞭解到自己的不足及研究新想法，有助於拓展視野，提升自我的醫療水準與概念，並能與世界各地的專家分享我們在台灣的努力成果，驗證我們研究發展方向的正確性與有效性。

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## 壹、目的

藉由各國 IC 學者的學術發表與討論，使我們除了解目前各國發展治療 IC 的發展方向與最新研究外，與國際專家的詢答討論，可提高我們對於 IC 認知的視野，進而利於國內發展 IC 治療理論之突破。

一、參加本次會議目的如下：

- (一) 錄取 ICS 討論式海報發表，並於會議期間進行發表。
- (二) 女性下尿路症狀 (Female LUTS) 排尿功能障礙討論。
- (三) 神經性膀胱患者的複發性尿路感染議題討論。
- (四) 功能性出口阻塞 (包括骨盆底肌肉和骨盆腔疼痛) 原因探討。
- (五) 婦女尿失禁治療議題探討。

## 貳、過程

### 一、會議簡介

2022年 ICS 國際尿失禁防治協會年會於2022年09月07日至09月10日於利維也納，ICS 年會匯聚了 LUTS、尿失禁和盆底疾病研究和治療領域最知名的國際專家。

會議是多學科的，歡迎泌尿科醫生、婦科醫生、神經泌尿科醫生、物理治療師、護士、助產士和研究科學家參加。

### 二、與會行程

日期	會議名稱
2022/09/07	開幕式
2022/09/07-10	大會各重要演講(含海報發表)
2022/09/10	閉幕式

### 三、會議重點

(一)女性排尿功能障礙：

1. 診斷方法與評估：女性排尿功能障礙是一種常見的臨床疾病，但令人困擾的是缺乏共識是否一定需做尿動力學共識的定義。
2. 本次研討會排除醫源性排尿功能障礙：
  - (1)具備對排尿困擾的女性進行初步評估的能力。
  - (2)識別排尿的重要臨床病症的尿動力學發現。
  - (3)了解我們目前臨床上對阻塞和膀胱壓力低下的細微差別。

## (二) 盆底腹腔鏡手術

1. 近年來，腹腔鏡手術有很多新進展，鼓勵臨床醫生於傳統手術外之改良技術使用於骨盆底肌肉障礙問題。
2. 此課程希望提供有關腹腔鏡手術技術前趨，學習應用腹腔鏡檢查骨盆底解剖型態，骨盆腔器官脫垂復發如何處理等。概述外科解剖學和解決不同骨盆底問題的關鍵技術，了解失禁和脫垂無網替代品的必要性，本次研討會涵蓋無網吊帶應用於子宮陰道脫垂和腹腔鏡陰道懸吊術的技術。

(三) 前列腺切除術後的手術管理：失禁、檢查、選擇和醫病決策，關於手術選擇和前列腺切除術後失禁治療是近期熱門話題，需要關注老年人群，嚴重型的壓力性尿失禁的主要治療方法仍然是 AMS 800，近年引入新的可調節型之植入物，將有助於處理複雜的漏尿失禁問題。

## (四) 慢性陰部疼痛：

1. 國際陰道疾病研究學會將外陰視為至少3個月的外陰疼痛，沒有明確的可鑑定的原因可能有潛在的相關因素。這定義最近已經與國際婦女性健康研究學會和國際骨盆疼痛學會達成共識，作為外陰患者新術語的組成部分。
2. 它將外陰概述為多因素條件，而不是特定實體，其中相關因子本身是疾病的病理生理成分，在每個個體中具有不同的相關性。外陰病的病因尚未完全了解，許多研究結果表明，神經病理機制可能是疾病的臨床症狀的基礎，包括神經增生，炎症，中樞或外周傷害性功能障礙，以及連續骨盆底肌肉的參與。

3. 在任何“觸發因素”（感染，創傷，過敏，激素因子等）已經解決之後，中樞和周圍敏感化似乎與長期存在的症狀有關。

4. 外陰治療的終點可歸納如下：

(1)減少觸發和刺激刺激

(2)周邊傷害性封鎖

(3)中央抑制

(4)限制骨盆底功能障礙

(5)限制綜合徵的心理功能障礙

(五)骨盆底疾病的多學科團隊（MDT）方法：評估整體性多學科照護方法治療骨盆底疾病的重要性及受各種骨盆底症狀影響的患者提供全面服務，瞭解骨盆底涉及不同專業的重要性，骨盆底整體的作用及方法評估伴隨的多種脫垂病患，描述患者從轉診到診斷性檢查再到骨盆底患者最終的治療。

(六)海報發表

Explore the effect of combined autonomic and pelvic floor biofeedback intervention for patients with interstitial cystitis/bladder pain syndrome

Hypothesis

The literature points out that the application of biofeedback therapy is helpful, and can also effectively reduce stress and anxiety

in patients with Interstitial Cystitis/Bladder Pain Syndrome (IC/BPS). The study is to investigate the effect of autonomic biofeedback combined with pelvic floor biofeedback in patients IC/BPS, with regard to the clinical symptom index (ICSI), clinical problem index (ICPI), and the improvement of depression and anxiety.

#### methods

In this study, patients with IC/BPS underwent cystodilation, and were given 4 times of pelvic floor muscle relaxation training and 3 times autonomic biofeedback intervention. Changes in symptoms and emotional symptoms were analyzed by generalized estimating equations (GEE) to compare whether there were significant differences before and after intervention.

#### Results

##### (1) Improvement of ICSI and ICPI, PUF, GRA

ICSI and ICPI scores after six weeks of treatment were significantly reduced respectively. Compared with the baseline value, ICSI and ICPI had an improvement effect but not significant after three months of treatment.



The PUF score were reduced after two weeks, four weeks and six weeks of treatment respectively. However, the improvement effect was not significant after 3 months. The GRA had a significant improvement only after six weeks of treatment (Table 1).

(2) Analysis of ICSI-2, revealed that: after six weeks, a significant reduction of more than 1 point was achieved, but after three months, there was no significant difference. The ICPI-1, achieved a significant reduction after two, four and six weeks of continuous treatment intervention. The improvement effect was not significantly different after three months. (Table 2)

#### Interpretation of results

##### (1) Improvement of ICSI and ICPI:

The ICSI ICPI revealed significant improvement after 6 weeks, but no improvement post 3 months treatment implicit the intervention were effective in the short period, not in long period. Whether the result was due to the autonomic or pelvic biofeedback should be further clarified..

##### (2) Improvement of urinary tract symptoms:

The PUF score showed improvement in short time period (6 weeks), but not in the long period (3 months) mean the biofeedback may be only effective in the short term period. Both VAS pain and urgency were improved after 6 weeks of continuous intervention, but not after three months, may be the only short time effective.

(3) Improvement of anxiety and depression symptoms:

The BDI was the only clinical index that could maintain significant improvement for three months in this study showed that combined autonomic and pelvic biofeedback should be the core-strategy of treatment in term of depression.

(4) The sub-score of ICSI, ICPI revealed only ICSI-2, ICPI-1 have significant improvement. The underlying reason could not be clarified from our study.

Concluding

After cystodilation for IC/BPS patients, 4 times of pelvic floor muscle relaxation training and 3 times of autonomic biofeedback intervention can be used to improve short-term clinical severity, urinary tract symptoms and emotional symptoms.

The improvement of depressive symptoms can last up to three months after the intervention, and the effect of symptom improvement in the medium and long term (six months) still needs to be further evaluated by increasing the number of cases and continuous follow-up.

References:

1. I-Chun Chen, Ming-Huei Lee, Hsuan-Hung Lin, Shang-Liang Wu, Kun-Min Chang & Hsiu-Ying Lin. (2017). Somatoform disorder as a predictor of interstitial cystitis/ bladder pain syndrome Evidence from a nested case-control study and a retrospective cohort study. *Medicine*, 96(18).
2. Chui-De Chiu, Ming-Huei Lee, Wei-Chih Chen, Hoi Lam Ho & Huei-Ching Wu. (2017). Alexithymia and anesthetic bladder capacity in interstitial cystitis/bladder pain syndrome. *Journal of Psychosomatic Research* , 100, 15-21.
3. Goessl, V. C., Curtiss, J. E., & Hofmann, S. G. (2017). The effect of heart rate variability biofeedback training on stress and anxiety: A meta-analysis. *Psychological Medicine*, 1-9.

Keywords: Painful Bladder Syndrome/Interstitial Cystitis (IC), Pelvic Floor, Quality of Life (QoL), Conservative Treatment

## 參、心得及建議

此次學術不僅能與各國大師做深度的交流，吸收世界各地優秀學者所提供的研究資訊之外，各國仍致力婦女泌尿這個專業，也發表了不少的新概念。

各國與會者提出的最新成果和交流思想應用都能促進更多學術發展，此行接收到更多元的資訊同時也將自己研究分享於各國專業醫師，期望能有所突破讓更多病患受惠，有利於改善目前的治療方式提高病患的治療品質。

為使活動訊息更加方便取得、快速傳達及透明化，在行政安排上，也結合了多項現代電子科技達到宣傳效果，包括各種社群媒體：FACEBOOK、Twitter、Instagram、YOUTUBE 及 google 等多項管道。

藉此建議除專業知識外，應把握機會與各國學者交流建立人脈，拓展醫學外交基礎。另外，ICS 國際尿失禁防治協會年會，每年於不同城市舉辦，除了參與會議外，應藉此參訪附近研究機構或醫院，以提升經營管理、臨床實務及學術研究等的質與量。

一、海報研究主題：

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## Explore the effect of combined autonomic and pelvic floor biofeedback intervention for patients with interstitial cystitis/bladder pain syndrome

Ming-Huei Lee<sup>1,2\*</sup>, Huei-Ching Wu<sup>1,2</sup>, Yi-Lan Chen<sup>3</sup>

<sup>1</sup> Department of, Urology, Miao-Li Hospital, Ministry of Health and Welfare, Taiwan  
<sup>2</sup> Central Taiwan University of Science and Technology, Taichung, Taiwan  
<sup>3</sup> Department of Psychiatry, Miao-Li Hospital, Ministry of Health and welfare, Taiwan

### Hypothesis / aims of study

The literature points out that the application of biofeedback therapy is helpful, and can also effectively reduce stress and anxiety in patients with Interstitial Cystitis/Bladder Pain Syndrome (IC/BPS). The study is to investigate the effect of autonomic biofeedback combined with pelvic floor biofeedback in patients IC/BPS, with regard to the clinical symptom index (ICSI), clinical problem index (ICPI), and the improvement of depression and anxiety.

### Materials and methods

In this study, 28 patients with IC/BPS underwent cystodilation, and were given 4 times of pelvic floor muscle relaxation training and 3 times autonomic biofeedback intervention. Changes in symptoms and emotional symptoms were analyzed by generalized estimating equations (GEE) to compare whether there were significant differences before and after intervention.

### RESULTS & INTERPRETATION

#### RESULTS

(1) Improvement of ICSI and ICPI, PUF, GRA. ICSI and ICPI scores after six weeks of treatment were significantly reduced respectively. Compared with the baseline value, ICSI and ICPI had an improvement effect but not significant after three months of treatment. The PUF score were reduced after two weeks, four weeks and six weeks of treatment respectively. However, the improvement effect was not significant after 3 months. The GRA had a significant improvement only after six weeks of treatment (Table 1).

(2) Analysis of ICSI-2, revealed that: after six weeks, a significant reduction of more than 1 point was achieved, but after three months, there was no significant difference. The ICPI-1, achieved a significant reduction after two, four and six weeks of continuous treatment intervention. The improvement effect was not significantly different after three months. (Table 2)

#### INTERPRETATION

(1) Improvement of ICSI and ICPI: The ICSI ICPI revealed significant improvement after 6 weeks, but no improvement post 3 months treatment implicit the intervention were effective in the short period, not in long period. Whether the result was due to the autonomic or pelvic biofeedback should be further clarified.

(2) Improvement of urinary tract symptoms: The PUF score showed improvement in short time period (6 weeks), but not in the long period (3 months) mean the biofeedback may be only effective in the short term period. Both VAS pain and urgency were improved after 6 weeks of continuous intervention, but not after three months, may be the only short time effective.

(3) Improvement of anxiety and depression symptoms: The BDI was the only clinical index that could maintain significant improvement for three months in this study showed that combined autonomic and pelvic biofeedback should be the core-strategy of treatment in term of depression.

(4) The sub-score of ICSI, ICPI revealed only ICSI-2, ICPI-1 have significant improvement. The underlying reason could not be clarified from our study.

#### CONCLUSIONS

After cystodilation for IC/BPS patients, 4 times of pelvic floor muscle relaxation training and 3 times of autonomic biofeedback intervention can be used to improve short-term clinical severity, urinary tract symptoms and emotional symptoms. The improvement of depressive symptoms can last up to three months after the intervention, and the effect of symptom improvement in the medium and long term (six months) still needs to be further evaluated by increasing the number of cases and continuous follow-up.

#### REFERENCES

1. I-Chuan Chen, Ming-Huei Lee, Hsuan-Hung Lin, Shang-Liang Wu, Kun-Min Chang & Hsio-Ying Lin. (2017). Somatoform disorder as a predictor of interstitial cystitis/ bladder pain syndrome: Evidence from a nested case-control study and a retrospective cohort study. *Medicine*, 96(18).
2. Chui-De Chiu, Ming-Huei Lee, Wei-Chih Chen, Hoi Lam Ho & Huei-Ching Wu. (2017). Alexithymia and anesthetic bladder capacity in interstitial cystitis/bladder pain syndrome. *Journal of Psychosomatic Research* , 100, 15-21.
3. Goessl, V. C., Curtiss, J. E., & Hofmann, S. G. (2017). The effect of heart rate variability biofeedback training on stress and anxiety: A meta-analysis. *Psychological Medicine*, 1-9.

#### Experimental Paradigm

**Table 1.** The p values and effect sizes (B) compared with the first visit after two-weeks-treatment-program by using a GEE model

Measure	Post 2weeks		Post 4weeks		Post 6 weeks		Post 3months	
	f (95%CI)	pvalue	f (95%CI)	pvalue	f (95%CI)	pvalue	f (95%CI)	pvalue
ICSI	-1.9(-3.6, -0.1)	<0.05*	-2.6(-4.2, -1.0)	<0.02	-3.7(-5.2, -2.1)	<0.00*	-1.1(-2.7, 0.5)	0.08
ICPI	-1.6(-3.0, -0.1)	0.05	-1.6(-3.0, -0.1)	0.05*	-3.0(-4.5, -1.5)	<0.00*	-0.6(-2.0, 0.8)	0.37
PUF	0.8(0.3, 1.4)	<0.00*	1.6(1.0, 2.1)	0.00*	4.3(3.6, 5.0)	<0.00*	0.8(0.3, 1.3)	0.19
GA	-1.6(-3.0, -0.1)	0.05*	-0.6(-2.0, 0.8)	0.18	-3.0(-4.5, -1.5)	<0.00*	-1.6(-3.0, -0.1)	0.08
BDI	0.8(0.3, 1.4)	<0.00*	1.6(1.0, 2.1)	<0.00*	5.1(4.5, 5.7)	<0.00*	4.7(4.1, 5.3)	<0.00*
VAS Pain	-1.6(-2.9, -0.3)	0.05*	-0.6(-2.0, 0.8)	0.18	1.6(0.3, 2.9)	0.00*	4.6(4.1, 5.1)	0.00
VAS Urgency	-2.8(-4.1, -1.4)	0.00*	-1.7(-3.0, -0.4)	0.00*	1.6(0.3, 2.9)	0.00*	4.6(4.1, 5.1)	0.00
GRA	1.6(0.3, 2.9)	0.05	4.6(4.1, 5.1)	0.00	10.0(9.5, 10.5)	<0.00*	4.1(3.6, 4.6)	0.00

Adjusted for age, education and income. \*p<0.05.  
 CI, 95% confidence interval; ICSI, Interstitial Cystitis/Bladder Pain Syndrome; PUF, Pelvic Floor Biofeedback; GA, Generalized Anxiety Disorder; BDI, Beck Depression Inventory; VAS, Visual Analog Scale.

**Table 2.** ICSI - ICPI - The p values and effect sizes (B) compared with the first visit after two-weeks-treatment-program by using a generalized estimating equation model

Measure	Post 2weeks		Post 4weeks		Post 6 weeks		Post 3months	
	f (95%CI)	pvalue	f (95%CI)	pvalue	f (95%CI)	pvalue	f (95%CI)	pvalue
ICSI-1	-0.1(-1.2, 0.9)	0.91	-0.2(-1.2, 0.8)	0.99	-1.4(-2.4, -0.4)	0.00*	-0.8(-1.8, 0.2)	0.18
ICSI-2	-1.7(-2.4, -1.0)	0.00*	-0.6(-1.4, 0.1)	0.09*	-1.6(-2.3, -0.9)	0.00*	-0.1(-1.0, 0.8)	0.98
ICPI-1	4.7(4.1, 5.3)	<0.00*	4.9(4.3, 5.5)	0.00	4.5(3.9, 5.1)	0.00	4.0(3.4, 4.6)	0.00
ICSI-4	-0.5(-1.2, 0.2)	0.18	-0.4(-1.1, 0.3)	0.71	-2.6(-3.2, -2.0)	0.00	-2.1(-2.7, -1.5)	0.00
ICPI-2a	-1.0(-1.6, -0.4)	<0.00*	-1.6(-2.2, -1.0)	0.00	-1.8(-2.4, -1.2)	<0.00*	-1.1(-1.7, -0.5)	0.00
ICPI-1	4.0(3.4, 4.6)	<0.00*	4.0(3.4, 4.6)	<0.00*	4.5(3.9, 5.1)	<0.00*	4.0(3.4, 4.6)	0.00
ICPI-2	-1.0(-1.6, -0.4)	0.00*	-0.8(-1.4, -0.2)	0.00	-0.8(-1.4, -0.2)	0.00	-0.8(-1.4, -0.2)	0.00
ICPI-3	4.7(4.1, 5.3)	0.00	4.9(4.3, 5.5)	0.00	4.5(3.9, 5.1)	0.00	4.0(3.4, 4.6)	0.00
ICPI-4	4.7(4.1, 5.3)	0.00	4.9(4.3, 5.5)	0.00	4.5(3.9, 5.1)	0.00	4.0(3.4, 4.6)	0.00
ICPI-5a	-1.6(-2.4, -0.8)	0.00	-1.6(-2.4, -0.8)	0.00*	-1.6(-2.4, -0.8)	<0.00*	-1.6(-2.4, -0.8)	0.00

Adjusted for age, education and income. \*p<0.05.  
 CI, 95% confidence interval; ICSI, Interstitial Cystitis/Bladder Pain Syndrome; PUF, Pelvic Floor Biofeedback.

二、活動照片：

主 題：2022 年 ICS 國際尿失禁防治協會年會  
 時 間：2022/09/07-10

