出國報告（出國類別：口頭報告發表）

2016年泛太平洋學術會議(The 11th Pan-Pacific Continence Society Meeting)（PPCS)心得報告

服務機關：衛生福利部豐原醫院
姓名職稱：李明輝院長
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摘　　要

參與年度 PPCS 與各國前輩先進互相觀摩與交流，不僅有助於拓展我們的視野，提升我們的醫療水準與概念，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。

藉由口頭報告及海報，我們向全世界的先進與專家，詳細說明了我們的研究現況與方向，經由與國際一流專家的溝通，驗證成果的有效性，在與國際專家的詢答間，更帶給我們不同的觀點與新資訊，使我們能重新審視現況的不足與未來發展的方向與可行性。

(2016 年泛太平洋年度學術會議)

目　　次

頁 碼

本　　文

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。

過程

以下報告發表一至發表二。在發表過程中，對於其他不同切入點可以看見衍生出的成果，並讓我們思考其他可能性。

口頭報告：以視訊為基礎之智慧型手機間質性膀胱炎遠距照護系統

目的

間質性膀胱炎（IC）是一種慢性疾病，且嚴重影響病患的生活品質，目前尚未找到一種單一療法能對多數的病患有效。疼痛嚴重時常找尋急診求助，但並未接受到有效的處理，也因此造成醫療資源的浪費。

先前有研究報告指出，以特別製作的體能健身活動影片進行介入治療，就使用者觀點而言是較為適用的方式，幾乎所有受試者均同意特製影片介入(video-tailor intervention)的概念，且約有 36%的受試者喜歡以影片為基礎的介入方式勝過以文字為基礎的物理性活動介入方式。當設計一個影片時，大部份的受試者傾向由一個與他們相類似的人或一個示範角色去呈現個人的體能健身活動(personal physical activity)。大部份的病患會將他們的醫師視為一個示範角色，尤其是最常幫他們治療慢性病的醫師。由醫師來錄製具健康教育教材的影片集被認為較可有效舒緩 IC/BPS 病患的症狀並可有效強化病患的健康習慣。

Interstitial cystitis/bladder pain syndrome (IC/BPS) is a chronic syndrome characterized by bladder pain with irritative lower urinary tract symptoms, such as urinary urgency, frequency, and nocturia. Until now there is no specific treatment demonstrated as sufficient efficacy and evidence-based treatment guideline suggested first-line therapy including patient education, behaviour modification, and stress management should be offered for all patients. Recent studies showed telecare system, especially base on video-tailored, can improve the management of chronic diseases by

using mobile and internet to build up self-management system. The telecare system may provide multidisciplinary web-based educational, monitoring, and communication platform and help IC/BPS patients understanding of the interplay between symptom and quality of life, which resulted in increased motivation to follow treatment, awareness of management when symptom flared up, and participation in care. The aim of our study is to develop and investigate a video-based telecare system with contents of health education and communication of emergent outbreak to improve the quality of life for IC/BPS patients

研究目的及方法

本研究共有控制組27位及實驗組29位。病患於前測時分別填寫健康生活品質量表、間質性膀胱炎症狀及問題評分表、痛及尿急評量表等三項問卷；在視訊照護模式介入8週後，請病患再次填寫三項量表進行後測。問卷結果利用SPSS統計套裝軟體進行描述性統計、t 檢定及皮爾森chi-square 分析進行推論性統計、一般線性模型比較實驗組與對照組之前、後測改善結果。

研究目的：（1）由醫師錄製具衛教內容的視訊健康照護系統並整合智慧型手機與網路功能藉由每週衛教與緊急發作諮詢以降低間質性膀胱炎病患的疼痛與症狀。（2）藉由設計一個APP網頁服務系統以提供特製衛教影片照護IC/BPS的病患。除此外，亦將問題與回覆分別以文字或影片格式呈現，以協助病患突然發病時之緊急處理。
本研究納入條件及排除條件：納入條件為經醫師診斷為間質性膀胱炎，年齡介於21-50之病患。排除條件則為符合NIDDK排除條件之個案(如下): 1. 小於18歲 2. 良性或惡性膀胱腫瘤 3. 放射線膀胱炎 4. 結核膀胱炎 5. 細菌性膀胱炎 6. 陰道炎 7. Cyclophoshamide膀胱炎或其他化學性膀胱炎 8. 尿道憩室 9. 子宮、子宮頸、陰道或尿道癌 10. 急性皰疹 11. 膀胱或下段輸尿管結石 12. 每日排尿低於8次 13. 無夜尿 14. 使用抗生素或尿路抑制菌藥物後症狀改善 15. 症狀出現小

於9個月 16. 尿路動力學檢查出現不自主逼尿肌收縮 17. 尿路動力學檢查膀胱容積大於350西西，且無急尿感。

This is a prospective randomized controlled study. A total of 56 IC/BPS patients were recruited from the urological clinic and randomly assigned to either the study group (N=29) or the control group (N=27). In this study, a mobile service designed for providing health education by using video-education system and administrating questionnaires were used for health care and health management of IC/BPS patients. Video-education system was designed as multi-dimensional patient education including avoiding some sensitive food, symptom flare up during and/or before menstrual cycle, the management of sexual pain, relaxation of pelvic floor muscle, and stress management. Instead of patient education, a mobile service also provided monitor and communication platform by checking the health status items. The questionnaires, including SF-36 health survey, visual analogue scales (VAS) for the measurement of pain and urgency, and O'Leary-Sant symptom (ICSI) and problem index (ICPI), were administrated to measure the patient perception of health status before (pre-test) and after (post-test) video-education spanning a period of 8 weeks. Descriptive statistics were used to analyzed the demographic information, disease severity and questionnaires of the recruited patients, while the inferential statistics were applied to compare the improvement of health status and symptoms between the study and control groups, as well as between pre-test and post-test for both groups. General linear model was also used to compare 2 repeated measures (pre- and post-tests) of the questionnaires between the control and study groups.

結果：（1）SF-36健康生活品質量表之分析結果顯示，經由視訊照護模式介入後，實驗組高達七個構面（包括：身體功能、身體狀況

引起之活動限制、身體疼痛、自覺健康狀況、活力狀態、社會功能及情緒限制）都比控制組有顯著的改善（$p<0.05$）。（2）O' Leary Symptom Scale及VAS Scale的分析結果顯示，實驗組在『問題指數』比控制組有顯著的改善（$p<0.05$）。（3）比較文字型與視訊型衛教資料之成效顯示，利用視訊型衛教資料介入之病患，其生活品質量表中之五個構面（包括：身體功能、身體狀況引起活動限制、身體疼痛、社會功能及情緒限制）都比利用文字型衛教資料介入之病患有顯著的改善成效（$p<0.05$）；然而利用文字型與視訊型介入之兩組病患，其O' Leary Symptom Scale及VAS Scale之改善成效並無顯著差異。

The results showed that, except the mental health (p=0.057), the other 7 constructs of SF-36 survey for the study group with m-health intervention exhibited significant improvement (p<0.05) compared with those without intervention, indicating the QOL had been significantly improved (Table 1). For disease severity, the study group also showed more significant improvements than the study group with regards to O'Leary-Sant (Symptom and Problem) scales (p<0.05) and VAS-Urgency (p<0.01) compared those without intervention. Moreover, by comparing the outcomes between the patients with video-based intervention and text-based intervention, the former group exhibited higher QOL improvement (p<0.01) manifested in 5 SF-36 constructs (physical function, role physical, body pain, social function, and role emotion), while no significant improvement in disease severity was observed.

Changing lifestyle by health education is promising in improving the health status of the patients. The better effectiveness of video-based intervention suggests that patient's trust in physician or better physician-patient relationship can induce the reinforcing effect on preventing disease recurrence and improving QOL for BPS/IC patients.

結論：利用本研究所設計之智慧型手機APP及主治醫師所錄製之

視訊短片進行衛教可以明顯改善BPS/IC病患之生活品質。視訊型遠距照護及衛教系統比文字形能更有效地改善病患之生活品質。

The intervention of video-based health education is effective in improving the QOL for BPS/IC patients. Moreover, video-based intervention outperformed the text-based intervention in consolidating good lifestyle, improving QOL, and alleviating disease symptoms.

海報發表（一）

Dyspareunia radiated to the bladder may be a potential progressive phenotype of these Patients with Interstitial Cystitis / Bladder Pain Syndrome (IC/BPS)

Ming-Huei Lee[1,2] ,, Huei-Ching Wu[1,2] ,, Wei-Chih Chen[1]

[1] Department of Urology, Feng-Yuan Hospital, Ministry of Health and Welfare, Taichung, Taiwan, ROC
[2] Central Taiwan University of Science and Technology, Taiwan, ROC

Hypothesis / Aim of study :

A previous study established that interstitial cystitis/bladder pain syndrome (IC/BPS) patients had significantly more dyspareunia and fear of pain than healthy controls. We proposed that patients diagnosed of IC/BPS with the presence of dyspareunia could be a specific phenotype and compared as a separate group with a pure IC/BPS without presence of dyspareunia.

The purpose of this study is to examine the relationships between lower urinary tract symptoms including the symptom profile, using validated questionnaires, duration of symptoms, anesthetic maximal bladder capacity (MBC), severity of glomerulations, and dyspareunia in IC/BPS patients.

Study design, materials and methods :

A total of 156 IC/BPS female patients were included in this study. The diagnosis was made on the consensus of IC/PBS proposed by the Society for Urodynamics and Female Urology criteria in 2008. All patients were diagnosed on the basis of chronic (> 6 weeks) pelvic pain, pressure, or discomfort perceived to be related to the urinary bladder accompanied by at least one other urinary symptom, such as frequency, persist urge, or nocturia, in the absence of infection or other identifiable causes.

There were two questions for dyspareunia history: (1) "Do you feel pain during or after sexual intercourse" and (2) "At which site was the pain located (bladder, vagina, or both)". Urogenital prolapse, vaginal candidiasis, and cervical, uterine, and ovarian cancers were excluded.

All women completed measures of pain severity (visual analog scale, VAS) and bladder symptom severity [IC Symptom Index, IC Problem Index, and the Pelvic Pain and Urinary/Frequency (PUF) scale]. Respondents were asked to recall if they experienced any sexual pain during or after sexual intercourse in the past 1 year. Cystoscopic hydrodistension during general anesthesia was performed for 5 minutes and maximal bladder capacity was also measured. We used Chi-square tests to evaluate the associations between dyspareunia condition (presence or absence) and severity of glomerulations. Significance was set at $p < 0.05$.

Results:

Table 1
Differences between severity of symptoms measured by VAS-pain scale, urgency, ICSI, ICPI, and PUF scale, and the presence or absence of dyspareunia using one-way ANOVA and Chi-square test.

	Absence of dyspareunia ($n = 60$)	Presence of dyspareunia ($n = 96$)	p
Age (y)	45.51 ± 12.9	42.11 ± 12.0	0.06
Symptom duration	8.40 ± 7.8	8.01 ± 8.6	0.83
ICSI	13.03 ± 3.3	13.21 ± 3.5	0.76
ICPI	11.75 ± 2.9	11.82 ± 3.2	0.88
VAS-pain	4.56 ± 3.3	5.76 ± 2.5	0.01*
VAS-urgency	6.38 ± 2.1	6.81 ± 2.3	0.27
PUF	18.18 ± 5.5	20.69 ± 5.8	0.009*
MBC	654.25 ± 205.3	724.11 ± 214.6	0.04*
Glomerulations			
Grade 1	4 (6.6)	4 (4.1)	0.18
Grade 2	15 (25)	15 (15.6)	
Grade 3	16 (26.6)	29 (30.2)	
Grade 4	25 (41.6)	48 (50.0)	

Data are presented as n (%) or mean ± SD.
*$p < 0.05$.

Table 2
Comparison of patients negative for dyspareunia and those with pain in the bladder using one-way ANOVA, *post hoc* analysis, and Chi-square test.

	Absence of dyspareunia ($n = 60$)	Dyspareunia at bladder ($n = 44$)	p
Age (y)	45.51 ± 12.9	40.04 ± 10.3	0.07
Symptom duration	8.40 ± 7.8	8.45 ± 8.7	0.99
ICSI	13.03 ± 3.3	13.88 ± 3.3	0.48
ICPI	11.75 ± 2.9	12.14 ± 3.0	0.87
VAS-pain	4.56 ± 3.3	5.93 ± 2.5	0.08
VAS-urgency	6.38 ± 2.1	7.56 ± 2.0	0.03*
PUF	18.18 ± 5.5	20.60 ± 5.5	0.10
MBC	654.25 ± 205.3	753.88 ± 230.6	0.04*
Glomerulations			
Grade 1	4 (6.6)	3 (6.8)	0.24
Grade 2	15 (25)	6 (13.6)	
Grade 3	16 (26.6)	17 (38.6)	
Grade 4	25 (41.6)	18 (40.9)	

Data are presented as n (%) or mean ± SD.
*$p < 0.05$.

Table 3
Comparison of patients negative for dyspareunia and those with pain in the vagina, using one-way ANOVA, *post hoc* analysis, and Chi-square test.

	Absence of dyspareunia ($n = 60$)	Dyspareunia at vagina ($n = 41$)	p
Age (y)	45.51 ± 12.9	45.43 ± 13.0	0.99
Symptom duration	8.40 ± 7.8	7.89 ± 9.0	0.95
ICSI	13.03 ± 3.3	12.36 ± 3.8	0.65
ICPI	11.75 ± 2.9	11.15 ± 3.6	0.60
VAS-pain	4.56 ± 3.3	5.22 ± 2.6	0.58
VAS-urgency	6.38 ± 2.1	6.11 ± 2.3	0.84
PUF	18.18 ± 5.5	19.44 ± 5.7	0.57
MBC	654.25 ± 205.3	730.88 ± 172.9	0.15
Glomerulations			
Grade 1	4 (6.6)	1 (2.4)	0.23
Grade 2	15 (25)	8 (19.5)	
Grade 3	16 (26.6)	11 (26.8)	
Grade 4	25 (41.6)	21 (51.2)	

Data are presented as n (%) or mean ± SD.
* $p < 0.05$.

Conclusion :

IC/BPS women with dyspareunia have significantly more severe urological pain and a higher PUF scale score than women without dyspareunia. Patients with dyspareunia radiated to the urinary system (bladder) show more severe lower urinary tract symptoms (urgency) and larger anesthetic MBC.

Physicians should consider sexual pain disorder in the management of patients with IC/BPS and use the PUF scale to evaluate not only IC-specific lower urinary tract symptoms but also sexual pain disorder.

心得及建議

透過與各國專家學者的交流，對於 IC 的成因與治療方法撞擊出前所未有的火花，吸收各國在治療上的不同方式與成果，有利於改善目前的治療方式，提高病患的滿意度，進而提升醫病關係。

本次除安排與各國專家學者的交流外，更首次突破讓各國的病患與醫療人員進行實際的醫病經驗交流，透過不同的病患觀點與感受，使各國醫療人員能深入了解病患實際的感受與照護上應注意的地方，此有利於各國專家學者繼續發展完全治療 IC 的方法。

照　　片


Conclusions
00:50
The telecare has a role in multidisciplinary care of IC patients
The telecare system was perceived as easy and relevant, easy to use, and easy to understand for IC patients
The telecare system can quick update patient's symptom status, strict patient's monitoring and detailed medical report and saving time for doctors
The telecare system gave an understanding of the interplay between symptom flare-up, and increased compliance to treatment, enhanced patient active involvement in disease management
The telecare system can enhance communication between patients and physicians outside the hospital, improve IC patient's quality of life
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Y YOSHIMURA
Chih-Chieh Lin
Ji Sung Shim
Tsuyoshi Majima
Ming-Huei Lee
Won Hoon Song
Deyi Luo


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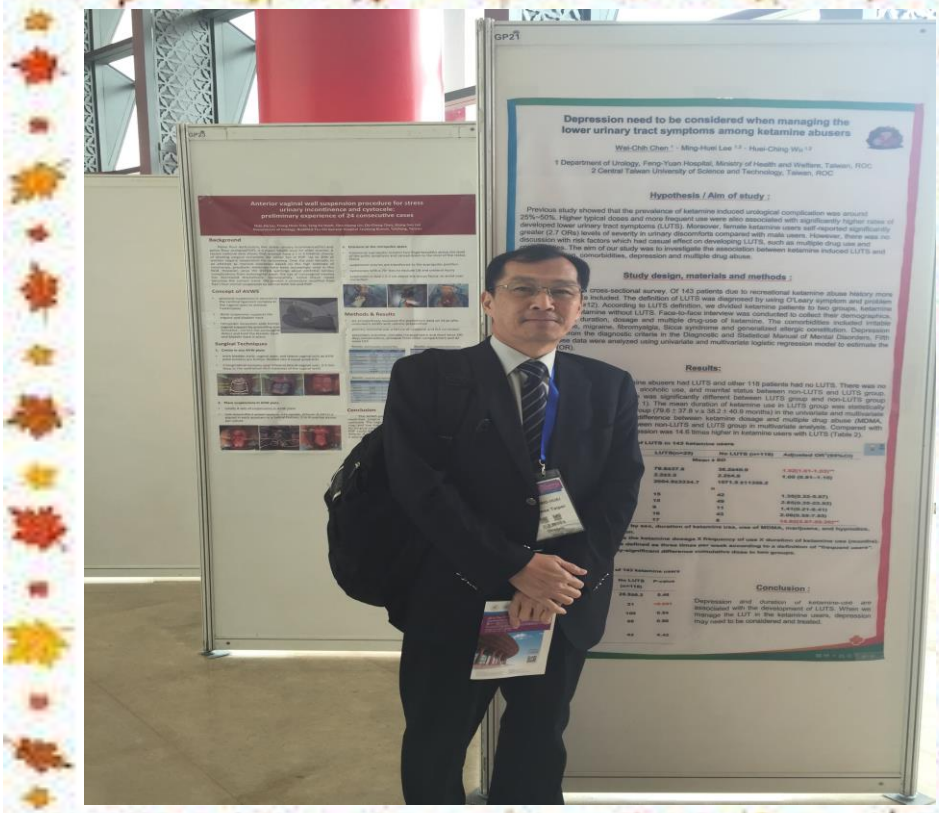
GP21
Depression need to be considered when managing the lower urinary tract symptoms among ketamine abusers
Hypothesis / Aim of study :
Study design, materials and methods :
Results:
Conclusion :


GP19
Epidemiologic Cohort Study of Somatic Symptom Disorder and Interstitial Cystitis / Bladder Pain Syndrome: Beyond the Effect of Anxiety and Depression
Hypothesis / Aim of study :
Study design, materials and methods :
Results :


大宴会厅
Grand Conference Hall