謝卿宏
SY43

台灣婦產科醫學會 院士
茂盛醫院 婦女泌尿科主任
璟馨婦幼醫院 資深院長顧問
部定副教授
中山醫學大學 醫學博士

Chronic Pelvic Pain and Painful Bladder Syndrome

Ching– Hung Hsieh MD

Chronic pelvic pain is the pain presents either continuously or intermittently for six months or longer. It has been estimated it might affect 5-15% of women during some time in their lives. Organic or functional disorders of genitourinary, gastrointestinal, and neuromuscular systems might cause the problem. The differential diagnosis of possible causes of chronic pelvic pain includes interstitial cystitis or painful bladder syndrome (IC/PBS), urethral syndrome, pelvic relaxation, pelvic vascular congestion, endometriosis, pelvic adhesion, constipation, irritable bowel syndrome, musculoskeletal or neurologic factors, including myofascial pain and nerve entrapment, psychologic factors, etc. In case of chronic pelvic pain, the differential diagnosis depends on history taking, physical examination, including PV and Carnett' s sign, review of systems, laboratory tests, psychologic test, and laparoscopy, etc.

Once a female patient of chronic pelvic pain simultaneously suffered from persistent urinary frequency, nocturia, and urinary urgency, it is necessary to evaluate if she is a possible victim of IC/BPS. Traditionally, the diagnosis for IC/BPS must add urinalysis, urine culture, one week viding diary, urodynamic study, urine cytology, and the findings after cystoscopy and hydrodistention under intravenous general anesthesia. And the O' Leary-Sant Interstitial Cystitis Symptom Index and the Interstitial Cystitis Problem Index are reliable validated tools in the evaluation of patients with IC. However, IC/BPS has been described as a chronic debilitating sterile inflammatory multifactorial bladder disease or a chronic syndrome of the bladder of unknown etiology, based on current diagnostic criteria, still implies a broad spectrum of disorders which make it difficult to develop an effective therapy for it. Treatment for IC/PBS up to present has mainly been based on empiricism and the consensus on the best available treatment among the widely used therapies for this disease is lacking. Furthermore, the duration and improvement level of symptoms of such treatments for IC/BPS remain uncertain. However, based on our clinical experience in the treatment of IC/BPS, we reported that the daytime frequency/voiding volume and the nocturnal frequency/voiding volume of IC/BPS patients all improved significantly after hydrodistention and persistent bladder training. It also reveals significant long-term remission of the patients' symptoms after such treatment.

現職：高雄市小港醫院副院長
高雄醫學大學婦產科學教授
高雄醫學大學醫研所醫學博士
台灣福爾摩莎婦女泌尿醫學會理事長
國際婦科微無創海扶刀醫學會理事
台灣婦產科內視鏡微創醫學會理事
台灣更年期醫學會理事

龍震宇

SY44

Therapeutic options for refractory overactive bladder

OAB is a common, disabling condition afflicting approximately 17% of the population. Symptoms associated with OAB include urgency to void, urinary urgency incontinence, abnormal voiding frequency, and nocturia. There are three standard lines of clinical treatment of OAB recommended by the most recent AUA/SUFU guidelines, with first-line therapies being less invasive than the second- and third-line therapies.

First-line treatment options for OAB involve behavioral therapy and include treatment options such as bladder training, pelvic floor muscle training, and fluid management. Second-line treatment options for OAB consist of pharmacologic therapies such as anti-muscarinic drugs and a beta 3-adrenergic receptor agonist. The challenge with second-line therapies has been both patient adherence and persistence of therapy in actual clinical practice. A recent study reviewing mirabegron beta-adrenergic receptor agonist therapy for OAB showed low adherence (44%) and persistence (19%) to this therapy after 12 months of treatment initiation.

Third-line treatment options although more invasive have been shown to achieve better improvement of refractory OAB symptoms. Third-line therapies include intra-detrusor botulinum toxin A (Botox), sacral nerve stimulation (SNS), and tibial nerve stimulation (TNS). Herein, we review innovative technologies being developed/evaluated for OAB management as the search for alternative interventions with greater patient acceptance, adherence, and persistence moves forward.

New technologies for the treatment of OAB are under active development. Whether they modify and/or improve established therapies or newer technologies such as radiofrequency ablation of the bladder, many hold promise as new options for treating OAB. Some of these therapies have already shown promising results in early clinical trials, while others are just beginning trials or are still in the development phase. These newer therapies if proved to be safe and efficacious may one day alter our current management of patients with OAB.

現職：臺北市立聯合醫院仁愛院區主治醫師
經歷：臺北市立聯合醫院婦幼院區主治醫師
馬偕醫院主治醫師
英國 Croydon University hospital 研修醫師
馬偕醫院婦女泌尿學科研修醫師
馬偕醫院婦產部住院醫師

林姿吟
SY45

Treatment options for mild stress incontinence : physiotherapy vs vaginal laser

Tzu Yin Lin, MD
Department of OBS&GYN, Taipei City Hospital, Ren AI branch

The prevalence of urinary incontinence in middle-aged and older women in the general population was around 30– 60%. Ageing, hormonal deprivation in postmenopause and metabolism of connective tissues and decreases collagen production leading to pelvic floor dysfunction are the factors of stress urinary incontinence. There are wide different treatment options in urinary incontinence from surgery to conservative modalities. Among these, conservative management approaches are recommended as the first- line treatment to manage with urinary incontinence. We compare the results of physiotherapy and vaginal laser used for the treatment of stress incontinecne.

Physiotherapy management of urinary incontinence, including pelvic floor muscle training, electrical stimulation, biofeedback, magnetic stimulation and vaginal cones is very popular. Pelvic floor muscle exercises (PFME) offers a possible reprieve from UI. Therefore, PFMT remains a key factor in the prevention and treatment of UI. Another popular intervention used by physiotherapists to reduce UI is ES. It is one of the first- line conservative treatment option for female UI and widely used in the management of it. ES physiologically produces muscle hypertrophy, normalises the reflex activity of the lower urinary tract and increases circulation to muscles and the capillary system. Assisting patients for the determination and also their exercise the PFM properly is accepted as the main objective of biofeedback. Firstly, it provides them an indication of their PFM activity at rest, secondly, it gives not only the strength of individual contractions of the PFMs but also the strength of the contracting PFMs or the way in which certain muscles contract and the direction of contraction. Magnetic stimulation is a novel approach, coming up in recent years. The United States Food and Drug Administration approved MS as a conservative treatment for UI in 1998. An electric current is passed around a metal coil, generating an electromagnetic field. When the person exposed to this field, electric current is generated in tissues. Thus, PFMs is stimulated by the MS in a similar way to ES.

Recent evidence supports laser treatment as an alternative and effective intervention for stress urinary incontinence. The improvement rate of laser treatment for SUI is 38-77%. It is not recommended for the patients whose pad test is over than 10gm.

蘇聰賢

SY46

- Superintendent, Hsinchu Mackay Memorial Hospital
- Professor, Dept of Obs/Gyn. Mackay Memorial Hospital / Mackay Medical College
- Professor, Taipei Medical University
- Treasurer and the Chair of The Education Fund Committee, Asian Oceania Federation of Obs. & Gyn. (AOFOG)
- President, The Asia-Pacific Urogynecoclogy Association (APUGA)

Recent disputes and recommendations of transvaginal mesh in the treatment of pelvic floor prolapse

Tsung-Hsien Su MD/PhD
Superintendent, Mackay Memorial Hospital, HsinChu

The traditional surgical treatment for pelvic floor prolapse (POP) is anterior and posterior colporrhaphy (AP repair) and/or vaginal hysterectomy (VTH). However, the success rate of anatomical cure after traditional repairs was not durable (Lin, Su and Wang et al. Formosan MJ 2005). In order to prevent recurrent prolapse, a synthetic mesh served as a graft was developed and adopted in 2004.

The Cochrane database reviewed revealed the use of mesh has significantly reduced the recurrent prolapse rate or patients' awareness of prolapse, in comparison with those of native tissue repair(14% vs. 46% for anatomic recurrence; Maher et al. Cochrane data base reviews 2013; and 2016). Nevertheless, the use of mesh might cause some complications; moreover, some were specific to synthetic mesh.

In 2008, FDA issued a public health notification on serious complications associated with mesh to treat POP and stress urinary incontinence(SUI). Thereafter, the trend of using mesh was changed due to the different clinician's practice pattern and numerous class-action lawsuits. After 6 years' monitor and investigations, FDA reclassify the TVM to class III. Further, the FDA ordered 2 manufacturers of the 3 TVM to stop selling and distributing their products immediately in April 16, 2019. The FDA's policy and the negative press have tremendous impact against the use of mesh during the past 10 years.

In October 2019, FIGO's reviews and statements on use of synthetic mesh for POP and SUI (Ugianskiene A, Su TH, W Davila; Int J Gynecol Obstet 2019) was issued and focused how to reduce the risk of using mesh; including the optimal selection of indicated patient, informed consent, appropriate technical training and post-operative follow up and audit. Taiwan women's right group protested and questioned about the safety of mesh's use on July 30, 2019. TFDA gave a safety announcement on the use of TVM that should pay attention on the physician's training, patient's selection and pre-operative evaluation on the benefits and risks on patient, and also post-operative follow-up.

In conclusion, TVM has its benefit on anatomic outcomes, but it still has associated complications and some of them may be permanent. The balance of benefits and risks is still not conclusive. "Mesh or not mesh" or how to apply mesh for POP management will be discussed in the presentation.

梁景忠
SY47

長庚紀念醫院林口總院 婦產部婦女泌尿科教授
長庚大學 醫學系部定教授
台灣婦女泌尿暨骨盆醫學會 TUGA 常務理事
亞太婦女泌尿暨骨盆醫學會 APUGA 學術委員會主席

Management options for recurrent or advance pelvic organ prolapse: mesh vs no mesh

The lifetime risk of pelvic surgery for prolapse is between 10% and 20%, and many patients require repeat surgery for recurrence. Several techniques are available for pelvic organ prolapse (POP) repair. Depending on the material used to restore pelvic organ support, these techniques can be classified as native tissue repairs or reinforced repairs, including synthetic meshes and biological grafts.

The recurrence rate of traditional repair methods using native tissues, such as colporrhaphy, paravaginal repair and sacrospinous suspension is higher than that of the vaginal meshes. In the anterior compartment, permanent mesh repairs have better objective and subjective results, compared to native tissue repairs. However, permanent meshes are associated with higher rates of mesh-related complications, de novo stress urinary incontinence and bladder injury. With regard to posterior compartment prolapse, lack of high-quality evidence does not allow us to draw safe conclusions. In the apical compartment, sacrocolpopexy offers better results and causes fewer mesh-related complications than transvaginal procedures, but it is an invasive procedure. Minimally invasive, laparoscopic or robot-assisted, sacrocolpopexy are expected to have the same results as open procedure.

International guidelines advocate native tissue repair as the principal surgical method for POP, while synthetic mesh augmentation is mainly used in patients with recurrent and advanced prolapse with severe symptoms. To date, few trials have reported results separately for women undergoing their first or a repeat procedure. The management of recurrent POP is still a major challenge. Multiple options exist for surgical management of recurrent POP including transvaginal native tissue repairs (colporrhaphy, sacrospinous ligament fixation, uterosacral ligament suspension, iliococcygeus suspension); sacrocolpopexy with mesh performed abdominally or laparoscopically and transvaginal mesh repairs. Unfortunately, there are very few studies providing high-level evidence regarding the optimal surgical approach.

現職：台北榮總婦女醫學部產科主任
亞太婦女泌尿醫學會秘書長
台灣婦科醫學會秘書長
台灣婦女泌尿暨骨盆醫學會理事
台灣福爾摩莎婦女泌尿醫學會理事

洪煥程
SY48

Prevention and management of complications of Transvaginal Mesh (TVM) in the treatment of pelvic organ prolapse

Pelvic organ prolapse (POP) is quite common among the aging female population. Up to half of parous women demonstrate POP on examination, although only 3– 6% note symptoms. These problems are so common and bothersome that women have a chance of electing surgical correction for POP. Mesh used in POP repair can help reduce the risk of anatomic recurrence; however, the rate of complications is increased compared with a native tissue repair. In the 2013 Cochrane review, a meta-analysis by Maher et al. found that women undergoing POP repair without mesh had a 2- fold higher risk of anatomic recurrence. More recently, the definition of " success" has shifted to patient perception of the outcome rather than strict anatomic divisions of POP. Within this new paradigm, functional outcomes of POP repairs with and without mesh appear similar.

The marketing, availability, and technical simplicity of prepackaged kits contributed to the increased use of mesh, which also meant an increased incidence of complications. The US Food and Drug Administration (FDA) noted a 5-fold increase in complications from the 2005– 2007 period to 2008– 2010. In 2008, the FDA issued a public health notification regarding transvaginal placement of mesh, stating that >1000 complications were reported and recorded within the Manufacturer and User Device Experience database during a 3-yr period by nine manufacturers. The notification also urged physicians to inform patients of potential complications and to obtain specialized training in mesh implantation before performing such procedures. In 2011, the FDA updated its previous notification and cautioned the continued use of mesh given that it did not find conclusive evidence that mesh improves clinical outcomes. That same year, the International Urogynecological Association/International Continence Society established a standardized classification of mesh-related complications. In 2014, the FDA reclassified transvaginal mesh for POP from a moderate risk to a high-risk medical device. We provide a practical guide for Urogynecologist or Gynecologist regarding the prevention, recognition, and management of mesh-related complications placed for anterior compartment Pelvic organ prolapse.