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Certificate Course for Allied Health Professionals | CME/CNE Course | Course No. C299

Certificate Course on
Mental Health 2017

Jointly organised by

The Federation of Medical Societies of Hong Kong

The Hong Kong College of Psychiatrists

Date	Topics	Speakers
8 May	Anxiety and Phobias	Dr Elisabeth Wong Associate Consultant North District Hospital
15 May	Dementia	Dr Chi-leung LAM Private Psychiatrist
22 May	Insomnia & Management of Sleep Disorders	Dr Chi-leung LAM Private Psychiatrist
29 May	Common Psychiatric Disorders in Children & Adolescents	Dr Venus TAM Associate Consultant Castle Peak Hospital
5 June	Psychosocial Approaches in Psychiatry	Dr. John SO Private Psychiatrist
12 June	Psychosis	Dr Shu-keung LIEM Private Psychiatrist

Dates : 8, 15, 22, 29 May, 2017 & 5, 12 June 2017 (Monday)
Time : 7:00 pm – 8:30 pm
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The Hong Kong Association of Oral and Maxillofacial Surgeons Ltd.

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17 May	Dentofacial Deformity	Dr Julianna Cho-hwei LIEW Specialist in Oral and Maxillofacial Surgery Department of Health
24 May	Cleft Lip and Palate	Dr Mei CHONG Specialist in Oral and Maxillofacial Surgery Private Practice
31 May	TMJ Diseases	Dr Miko LO Specialist in Oral and Maxillofacial Surgery Department of Health
7 Jun	Jaw Cyst and Tumour	Dr Philip Kin-man LEE Specialist in Oral and Maxillofacial Surgery Private Practice
14 Jun	Patient Management with Obstructive Sleep Apnea	Dr Jeni Lai-in HO Specialist in Oral and Maxillofacial Surgery United Christian Hospital Dr Angus HO Dental Officer United Christian Hospital

Date : 10, 17, 24, 31 May & 7, 14 June, 2017 (Every Wednesday)
Time : 7:00 p.m. – 8:30 p.m.
Venue : Lecture Hall, 4/F., Duke of Windsor Social Service Building, 15 Hennessy Road, Wanchai, Hong Kong
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The Cover Shot

This is a picture of 'La Sagrada Familia' that I have taken in my last visit to Barcelona, Spain, two years ago. La Sagrada Familia is one of Gaudi's most famous work in Barcelona. It is a giant Bascilica that has been under construction since 1882! When I visited the building, I saw the contrast in stone colour between the front and back of the building. Also the actual style of construction appeared somewhat different between the new and old parts of the building. The building is still under construction and it's not expected to be completed for some time yet. So, be prepared to see a lot of work continuing when you visit. This is exactly what medicine is, we have to merge old basic knowledge with new technology! Regardless of all the controversies in medicine, it is a truly magnificent way to merge old & new knowledges and progress, so as to benefit our patients in the future !

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Editorial

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Editor

Dr Cecilia WC CHEON

Urogynaecology is a sub-specialty of Gynaecology, and in some countries is also known as Female Pelvic Medicine and Reconstructive Surgery. In the China Mainland, it is known as '盆底學科'. An urogynaecologist manages clinical problems associated with dysfunction of the pelvic floor and bladder. Pelvic floor disorders affect the bladder, reproductive organs and bowels. In modern medicine, the mutual interest of urogynaecologists, urologists and colorectal surgeons in pelvic floor problems in women has led to a more collaborative effort in development of the respective area.

Common pelvic floor disorders include urinary incontinence, pelvic organ prolapse and faecal incontinence. Increasingly, urogynaecologists are also responsible for the care of women who have experienced obstetric anal sphincter trauma during childbirth. Urogynaecological problems are seldom life-threatening but they do have a major impact on the quality of life of affected individuals. As a usual treatment goal, there is a major focus on optimising treatment using conservative measures before embarking on more invasive methods. We encourage multidisciplinary practice with collaborative input from urologists, colorectal surgeons, elderly care physicians and physiotherapists. This is especially important in the care of patients with complex problems.

In Hong Kong, the prevalence of pelvic floor dysfunction is increasing with much increase in the demand for the urogynaecology service which may be due to a genuine increase or due to the enhancement on education & health care awareness in our female population. The lifetime risk of undergoing surgery for pelvic organ prolapse or incontinence has been estimated as 11% with a re-operation rate of 29%. Nowadays, it is also estimated that the frequency of urogynaecological surgery is similar to other operations like coronary artery bypass and total knee replacement.

It is the privilege of the Urogynaecology Association to contribute to the present issue of the Hong Kong Medical Diary. I have invited some of our subspecialty pioneers to write articles on their areas of interest namely, overactive bladder syndrome, stress urinary incontinence, pelvic organ prolapse, pregnancy related pelvic floor disorder, bladder painful syndrome, pelvic floor exercise and bladder training. Their articles are interesting to be read. Readers will recognise how much effort the authors have put to ensure their patients benefit most from the various modalities of treatment with quality of life improved. Hope you all enjoy reading our articles.

Update in the Treatment of Overactive Bladder Syndrome (OAB)

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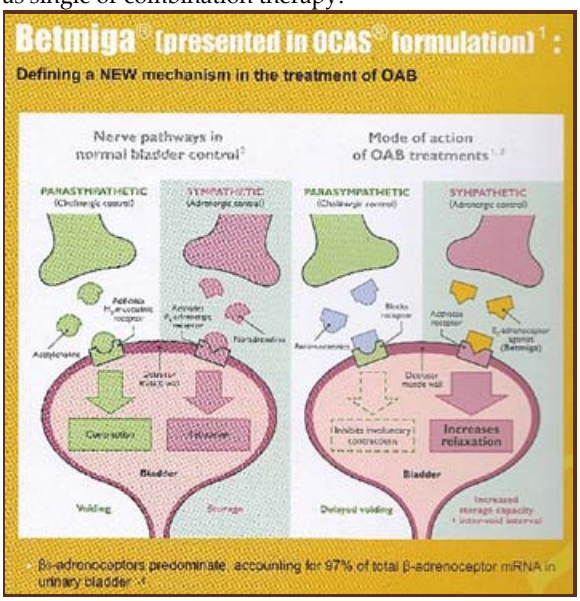
This article has been selected by the Editorial Board of the Hong Kong Medical Diary for participants in the CME programme of the Medical Council of Hong Kong (MCHK) to complete the following self-assessment questions in order to be awarded 1 CME credit under the programme upon returning the completed answer sheet to the Federation Secretariat on or before 31 May 2017.

OAB is characterised by storage Lower Urinary Tract Symptoms (LUTS) including urinary urgency and frequency with or without urgency urinary incontinence.[1] Around 10% of the global population is found to have OAB.[2,3]

Treatment strategies can be classified into first-line treatment which mainly involves behavioural modification, second-line treatment with pharmacological therapy and third-line treatment with surgery and neuromodulation.

First-line treatment involves advice on reduction of weight, caffeine intake and bladder retraining. The major pharmacological agents that can be used include anti-cholinergic or anti-muscarinic agents, β_3 adrenoceptor agonists and hormonal replacement therapy. There is no compelling evidence on the differential efficacy across all anti-cholinergic or anti-muscarinic agents, which include mainly oxybutynin, tolterodine and solifenacin. The medication choice should be based on the potential side effects, the patient's preference and comorbidities, history of use of the medications and cost. Patients are advised to continue with medications for four weeks to see the full benefits if there are no significant side effects. Common side effects include dry mouth and eyes, constipation, palpitation, eye pain and blurring of vision. There are also isolated case reports of confusion in the elderly. Anti-cholinergic or anti-muscarinic agents are the most commonly prescribed therapeutic agents, but bothersome side effects result in low patient adherence.[4,5,6] Solifenacin is a more selective M3 receptor blocker which is more favourable in its side effect profile.[7] Other types of anti-muscarinics include tolterodine and propanetheline which are thought to have variations in absorption, biological availability and hence resulting in varied effects among individuals.

Recently, a β_3 adrenoceptor agonist (Mirabegron) has been used for the treatment for OAB which was approved by FDA in 2012. Anti-muscarinics inhibit involuntary bladder contractions by blocking muscarinic receptors in the detrusor bladder wall whereas mirabegron stimulates β_3 adrenoceptors in the detrusor muscle, relaxing it during the storage phase.[8] It has been shown to have similar efficacy as the anti-muscarinics. The incidence of anti-muscarinic adverse events for mirabegron 50 mg after 12 weeks of treatment was similar to placebo. Patients had high compliance with mirabegron (up to around 90%), in contrast with traditional anti-muscarinic drugs (compliance rate of 20-30%). In addition, mirabegron has not been shown to induce hypertension nor a rise in intraocular pressure.[9] It is now recommended as the second-line pharmacological agent for the treatment of OAB either as single or combination therapy.[10, 11]



When medical treatments fail to control the symptoms, third-line surgical treatment can be offered which includes intravesical injection of Onabotulinumtoxin A (Botox A), neuromodulations, ileal conduit urinary diversion and augmentation cystoplasty. Botox A has been approved by FDA in 2013. Risks of the procedure include the necessity for repeated injections, possibility of intermittent catheterisation and increased risk of urinary tract infection. After injection, Botox particles will bind to nerve endings, internalise and block the release of acetylcholine at the neuro-muscular junction. Botox serotype A 100-200 units are injected into the submucosal layers which will be effective in a few days and lasts for 6-9 months.[12] Neuromodulations in OAB include sacral nerve stimulation and percutaneous tibial nerve stimulation. They are indicated when the OAB symptoms are not responsive to conservative pharmacological and Botox treatment. Other surgical options like ileal conduit urinary diversion and

augmentation cystoplasty are only considered as the last resort with many complications such as urinary retention, bowel disturbance, metabolic acidosis, urinary tract infection etc.

In conclusion, OAB has great impacts on the quality of life of millions of women whom warrant effective management. A multidisciplinary approach is the key to success. Response to anti-muscarinic agents tends to be idiosyncratic. β_3 adrenoceptor agonists is the new class of medications for OAB. Third-line treatment can be considered in carefully selected patients.

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MCHK CME Programme Self-assessment Questions

Please read the article entitled "Update in the Treatment of Overactive Bladder Syndrome (OAB)" by Dr Cecilia WC CHEON and complete the following self-assessment questions. Participants in the MCHK CME Programme will be awarded CME credit under the Programme for returning completed answer sheets via fax (2865 0345) or by mail to the Federation Secretariat on or before 31 May 2017. Answers to questions will be provided in the next issue of The Hong Kong Medical Diary.

Questions 1-10: Please answer T (true) or F (false)

1. **Overactive bladder (OAB) is characterised by storage Lower Urinary Tract Symptoms (LUTS).**
2. **Urinary urgency and frequency are both the symptoms of storage LUTS.**
3. **Pharmacological therapy is the first-line treatment of OAB.**
4. **Anti-muscarinic agents are not the most commonly prescribed therapeutic agents.**
5. **The bothersome side-effects (e.g. dry mouth, constipation, blurred vision…… etc.) of anti-muscarinic agents cause low patient adherence.**
6. **The β_3 adrenoceptor agonist (mirabegron), a new class of medications, has been approved by FDA in 2015 for the treatment of OAB.**
7. **Mirabegron can relax the detrusor muscle during the storage phase.**
8. **The incidence of anti-muscarinic adverse events of mirabegron was similar to placebo.**
9. **Mirabegron has not been shown to raise intraocular pressure, and it is not contraindicated in patients with glaucoma.**
10. **Surgical treatment should first be considered before applying any medical treatment.**

ANSWER SHEET FOR MAY 2017

Please return the completed answer sheet to the Federation Secretariat on or before 31 May 2017 for documentation. 1 CME point will be awarded for answering the MCHK CME programme (for non-specialists) self-assessment questions.

Update in the Treatment of Overactive Bladder Syndrome (OAB)

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Answers to April 2017 Issue

Novel Therapeutic Targets for Heart Failure

1. T 2. F 3. T 4. T 5. T 6. T 7. T 8. T 9. T 10. T


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Management of Stress Urinary Incontinence in Women

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Dr Wing-wa GO

Stress urinary incontinence is defined as complaint of involuntary loss of urine on effort or physical exertion or on sneezing or coughing. It is a well-known common problem in women. Most of the studies quote a prevalence of 25 to 45% of the female population. One study was conducted in Hong Kong in 2001 and 34% of the subjects reported stress urinary incontinence.[1]

The prevalence of the disease usually peaks at late middle age around menopause and then gradually increases again with age after 70[2]. Younger people are also quite commonly affected except their symptoms are usually mild and resulting in under reporting. Age, parity, vaginal delivery, menopause and chronic increase in intra-abdominal pressure are well known risk factors of stress urinary incontinence. All these factors are likely to have additive effects and most of the symptoms are thus manifested at around menopause.

The problem is important not only because it can lead to perineal rash, pressure ulcers and urinary tract infection, but also incurring a significant impact on quality of life. Ladies with this problem are more likely to reduce social interaction, have poor self-image, impaired psychological well-being and impaired sexual relationships. In severe cases, it can lead to depression.

Initial Assessment

When encountering patients with stress urinary incontinence, it is important to rule out the readily treatable causes and underlying pathology such as urinary tract infection, bladder stone, bladder tumour, mass in the abdominal or pelvic cavity and genital prolapse. When the symptoms have a short history, it is particularly important to note for any ascites and any pelvic tumour such as an ovarian cyst or a fibroid.

During the initial consultation, we need to assess the severity of the symptoms and the patients' quality of life. We also always try to identify any correctable risk factor. A three days bladder diary is an effective tool for assessing the patients' symptoms. It is always difficult for patients to recall retrospectively their urinary symptoms. However, charting the diary is highly patient dependent. Sometimes, we need to seek the help from the patients' carers. For the assessment of quality of life, there are a lot of validated questionnaires available. The most commonly used are ICIQ-UI short form, IIQ-7, King's Health Questionnaires (KHQ), UDI and UDI-6. These questionnaires serve as an objective way to assess the severity of the symptoms and also the treatment outcomes.

For geriatric patients, we also need to assess their cognitive function, independence of ADL (activities of daily living), co-existing systemic diseases and current medications.

Urodynamic studies are recommended if the patients fail to respond to conservative management or when surgical treatment is planned. It is important to identify any co-exist detrusor overactivity or voiding dysfunction.

Conservative Management

Life-style modification and pelvic floor exercise are the first line management. Patients are advised to reduce their body weight, adjust fluid intake, quit smoking, cut down caffeine intake and avoid activities leading to abdominal straining such as constipation and lifting heavy objects. There is actually no good evidence to demonstrate the usefulness of these modifications in managing stress urinary incontinence. Among these advices, weight reduction is probably the one with better evidence. The effect on urinary stress incontinence is more obvious in patients with BMI more than 30[3]. However, these advices are basically beneficial to our health and do no harm and patients are thus still receiving such advices.

For the pelvic floor exercise, it has been demonstrated to be effective in treating stress urinary incontinence. The success rate ranged from 40 to 70% when compared with no treatment[4]. Pelvic floor muscle training improves the pelvic muscle tone, facilitates more effective autonomic motor-unit-firing of the pelvic floor muscle and thus prevents pelvic muscle descent and urine leakage during increased intra-abdominal pressure. Timing of a pelvic muscle contraction is also important in maintaining continence. Patients are also taught to perform rapid, strong and well-timed pelvic muscle contractions whenever they sense a sudden increase in intra-abdominal pressure. Such a voluntary muscle contraction can prevent the urethral descent and urinary leakage[4]. It is recommended that pelvic muscle training exercise should be taught and patients should practise the training regularly for at least 3 months before we can assess the outcome of the exercise[5]. The compliance and the ability of patients to master the technique are the two main obstacles to the success of the training.

Electrical stimulation and bio-feedback can be used to improve the motivation and adherence to the training for patients who are unable to actively contract their pelvic muscle or unable to master the technique.

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However, these devices should not be routinely offered as first line treatment[5]. Supervised intensive training has been shown to have a better outcome than standard instructions which means we need adequate number of trained nurses, physiotherapists or doctors to supervise the patients. This is again a major drawback in Hong Kong.

Medical Treatment

People have also explored the possibility of drug treatment for this problem. Alpha adrenergic drugs have been tried for increasing the urethral closure pressure. However, the outcome is not promising and the drug effect is largely limited by the cardiovascular side-effects of the drugs[6]. This group of drugs is not recommended for the current management of stress urinary incontinence.

Duloxetine, a serotonin-noradrenaline reuptake inhibitor, is found to have a beneficial effect on stress urinary incontinence. The drug is centrally acting and enhances the effects of serotonin and noradrenaline in modulation of the micturition reflex. The bladder capacity and the sphincter muscle activity are then increased. As the drug is centrally acting, it has mild peripheral alpha adrenergic side-effects. Various studies have proved its effect in reduction of incontinence episodes and improvement in quality of life, but we do not know whether these effects are sustained in the long term. There is no comparison of the drug with surgical treatments. There is 1 in 6 to 1 in 8 patients in the studies stopped the treatment due to side-effect which most commonly was nausea[7]. Currently, the drug is not recommended for first line treatment. It may be offered as second line treatment if patients are not suitable for surgery or patients prefer pharmacological to surgical treatment[5].

Surgical Treatment

The definitive treatment of stress urinary incontinence is surgical treatment. The surgical procedures are mainly based on the theory of urethral hypermobility[8], intrinsic sphincter deficiency[9], 'Hammock' concept[10] and Integral Theory[11,12]. Before the year 2000, most of the surgical procedures were aimed at correcting the problem of urethral hypermobility by elevation of the bladder neck. Among all the procedures, the most successful surgical treatments are open colposuspension and autologous rectus fascial sling operation.

Open colposuspension has once been considered as the gold standard in the treatment of stress urinary incontinence. The bladder neck is elevated and suspended to the ipsilateral Ileopectineal Ligaments with non-absorbable sutures. It is supported by numerous studies. The cure rate is around 85 to 90% within the first year and around 80% of patients are expected to remain continent after 5 years[13]. The drawbacks of the procedure are that it is a major open procedure and is associated with significant morbidity namely voiding dysfunction, de novo detrusor overactivity and posterior compartment prolapse. It is not that effective in patients with intrinsic sphincter deficiency or co-existing detrusor overactivity.

Based on the Integral Theory, a new device namely the Tension Free Vaginal Tape (TVT) was introduced into clinical usage in 1995 by Dr Ulmsten[14, 15]. A knitted Prolene mesh is put in situ at the level of the mid-urethra so as to reinforce the action of the pubo-urethral Ligament. The procedure soon gains popularity as the success rate of the procedure has been demonstrated to be comparable to open colposuspension. The problems of voiding dysfunction and de novo detrusor overactivity are largely reduced as the mesh is put beneath the urethra in a tension-free manner. It acts as a passive support to the continence mechanism at the mid-urethra in contrary to the traditional procedures like colposuspension which provides support to the bladder neck by active elevation. The tape can be identified easily from the vaginal wound and cut down if post-operative voiding dysfunction leads to urinary retention. The procedure is not associated with any genital prolapse. Moreover, it is a minimally invasive procedure. The post-operative hospital stay and common post-operative morbidities are largely reduced.

The TVT is not without pitfalls. As it is a retropubic approach, there is a high chance of urinary bladder injury. Even worse, although rare, bowel injuries can occur and be fatal. To avoid the retropubic area and also based on the 'Hammock' theory, a transobturator approach in insertion of the tape was suggested[16, 17]. Besides reinforcing the mid-urethral region, it also serves as a support to the tissues posterior to the proximal urethra. The outcome of the new devices is comparable to the original TVT. The danger of bowel and bladder injuries is almost completely avoided. It also has an advantage of less post-operative voiding dysfunction than the retropubic approach. However in comparison with the retropubic approach, the transobturator approach tends to have a higher chance of groin pain, vaginal injury during the operation and higher chance of mesh erosion. The outcome may be worse than the retropubic approach for cases with advanced age and intrinsic sphincter deficiency.

The Prolene mesh is a foreign body to the human body. It carries a risk of mesh erosion to the vaginal mucosa. Fortunately, the complication rate is low (<2%) and seems acceptable[18].

The cure rate within 5 years of these mid-urethral sling is above 80%[18]. There seems to have no significant differences among the two types of approach. Papers of the long term (more than 10 years) outcomes of TVT started to have been published in recent years. The effectiveness of the procedure can be maintained. However, most of these data come from observational studies. More long term data from RCTs. are needed.

Summary

In managing women with stress urinary incontinence, it is important to make a proper assessment. After ruling out any treatable or underlying cause, we can advise on lifestyle modifications and refer the patients to Continence Nurses or physiotherapists for the pelvic muscle training.

If there is no improvement in symptoms after 3 months' trial of the exercise, we can counsel the patients for

surgical treatment. Nowadays, the primary procedure is the mid-urethral sling operation. The choice of different types of approach, retropubic or transobturator, depends on the surgeons' preference and experience.

Open colposuspension is still an option if the patient needs to have concomitant open surgery for other surgical or gynaecological diseases[5].

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The Use of Vaginal Pessaries in Pelvic Organ Prolapse

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Introduction

The pessary has been a component of the armamentarium for the management of pelvic organ prolapse for more than a millennium. Prior to the modern age of surgery, a pessary represented the only viable option for women with symptomatic pelvic organ prolapse. Nowadays, gynaecologists tend to view the pessary with a mixture of distain and reluctance. Specialist training in Hong Kong typically provides cursory experience with pessary selection and care and tends to minimise its importance. It is even largely ignored in the family physician training programme. The modern gynaecologic surgeon relies primarily on surgical treatments for the management of pelvic organ prolapse and resorts to the use of vaginal pessaries only in cases where surgical intervention is contraindicated or has failed to treat the problem.

To most general obstetricians and gynecologists, pessaries come in a bewildering variety of shapes and sizes with imprecise indications for selection. Guidance and teaching will vary depending on the article one reads or the expert one subscribes to. Given that there is a lack of consistent and reliable guidelines for the use of different pessary models, most doctors tend to become familiar with only a few pessary models and ignore the rest.

In this article, the selection, fitting, insertion and removal of the most commonly used pessaries are described. It is our contention that the modern pessary should take a central place in the management of pelvic organ prolapse.

History of vaginal pessary

The word pessary is derived from the Greek *peso* and the Latin *pessarium*, meaning an oval-shaped stone. It is different from a suppository in that a pessary will be removed after the period of time deemed necessary for the treatment. Pelvic organ prolapse was first described by the ancient Egyptians in the Kahun papyrus (circa 2,000 BC) and they also recorded the first attempt of its management in the Ebers papyrus (circa 1,500 BC), in which honey was applied on the prolapsed organ before manual replacement.

The first use of pessary for pelvic organ prolapse was described by Diocles of Carystos in 350 BC. He used half of a peeled pomegranate soaked in vinegar as a pessary. In the next 2,000 years, different objects and materials were used to make pessaries for pelvic organ prolapse. These included wool, linen, pebbles, brass, waxed cork and later silver, gold and other metals. Rubber became available in 1783 and was later replaced by plastic in the 1950s. Most of the vaginal pessaries as we know today were available in the mid-nineteenth century e.g. the ring pessary. More elaborate types of pessaries were developed later for those severe cases where the ordinary ones failed to contain the prolapse.

Types of pessaries

Most pessaries in Hong Kong are made of plastic (PVC) or silicone. The latter is the preferred material as it is inert and hypoallergenic. It does not absorb secretions and thus causes less malodorous side-effects. It is also soft and more pliable than PVC and therefore less likely to produce ulcers, bleeding and infection. However, the cost is considerably higher. Silicone pessaries can be autoclaved and are resistant to most antiseptics and are therefore reusable.

Pessaries for pelvic organ prolapse can be classified into two categories: support pessaries and space-occupying pessaries. Examples of support pessaries are ring (with or without support), Hodge and Gehrung pessaries. They lie along the vaginal axis with the posterior component sitting in the posterior vaginal fornix and the anterior component coming to rest just under the pubic symphysis, thus creating a "supportive shelf". Space-occupying pessaries are donut, cube and Gellhorn pessaries. They impinge on surrounding structures in the pelvis for support.

Given the scanty amount of research evidence available to guide pessary selection, clinical practice must be guided for the most part by pragmatic considerations. Published trials on the use of vaginal pessaries reveal a very consistent pattern. The ring pessary is the first line pessary for pelvic organ prolapse. If it fails, the Gellhorn pessary is preferred as a second choice, followed by the cube and donut pessaries.

Ring pessary

Ring pessaries should be the first choice for a woman with prolapse of any degree. It is the easiest pessary for women to use and for health care providers to prescribe. It can be folded for easier insertion. It sits along the vaginal axis and allows vaginal secretions to drain through. Coitus is usually not affected. It may be fitted with a support to prevent the cervix to prolapse through. It comes in different sizes from 52 mm to 100 mm.

Gellhorn pessary

The Gellhorn pessary can be used to treat all degrees of prolapse but it is preferentially used for higher stages of uterine or apical prolapse. It is bulky and may be difficult to handle by health care professionals. It is

solid and usually made of silicone. A handle is fixed to a circular disc with concave surface which sits at a right angle to the vaginal axis against the cervix, thus creating a suction force to keep it in place. It cannot be folded and insertion may be uncomfortable. Its bulky nature and the suction force make it difficult to be removed. Intercourse is impossible with a Gellhorn pessary in place. The handle may protrude from the introitus or impinge on the vaginal wall causing discomfort and pain. It comes in nine sizes ranging from small with an 38 mm diameter base to an 89 mm base.

Donut pessary

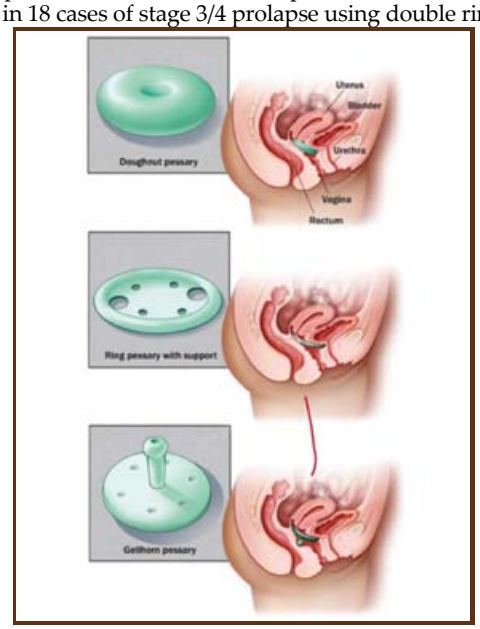
Donut pessaries are very similar in shape to the inner tube of a tyre. They are significantly thicker than ring pessaries and thus although they are soft, they cannot be folded or modified to permit easy insertion or removal from the vagina, which may be quite uncomfortable. Coitus is impossible. Although it will not sequester vaginal discharge, the bulkiness of a donut pessary still produces significant vaginal discharge and vaginal ulcers. Frequent removal, washing and vaginal irrigation is recommended. It comes in nine sizes up to a diameter of 95 mm.

Cube pessary

Cube pessaries are highly effective in treating vaginal vault prolapse that even other pessaries have failed to control. Their drawbacks are, however, significant and include a higher predisposition to vaginal erosions and infection, the need of daily removal to avoid vaginal odour and a general difficulty in insertion and removal. A cube pessary has six sucker-like concave surfaces which hold onto the vaginal wall so firmly that erosion is almost inevitable if it is left in the vagina for some time. It comes in eight sizes up to 57 mm.

Double pessaries

A trial of double pessaries is warranted if a single pessary fails. Different combinations of pessaries have been reported, including two rings, ring plus Gellhorn and ring plus donut. A case series reported a success rate of 72% in 18 cases of stage 3/4 prolapse using double rings.



Complications of vaginal pessaries

Common complications include vaginal discharge, odour, vaginal erosion and discomfort. A vaginal pessary is removed and replaced after cleaning at regular intervals to minimise these complications. This care is most practically done by the patient herself. For this reason, pessaries that are most easily inserted and removed by the patient are preferred whenever possible. Even if the patient is able to insert and remove the pessary herself, she should come back to her gynaecologist for vaginal examination for possible complications at least every few months. If she cannot do it herself, the frequency of clinic visit and replacement of the pessary should depend on the type of pessary used, health of the vagina and patient response to the pessary. It should be at least every six months. More frequent visits are recommended if symptoms, especially bleeding arise.

Pelvic pain is uncommon in pessary users and they should report pain to their gynaecologists or family doctors for early follow up and removal. A change in size or type may be necessary.

Vaginal discharge and odour are common in pessary users especially in those who are not taking care of the pessary themselves. The discharge is usually intermittent and inoffensive. It is caused by irritation from the pessary. They should be warned of this possibility before the use of pessary and advised to use warm water for douching if this happens. However, if the discharge is more severe, greenish and foul or fishy smelling, infection is likely and antibiotics may be indicated. The pessary may have to be removed temporarily if infection persists.

Vaginal bleeding is an alarming symptom to the patient. It is usually a result of friction rub from the pessary on the vaginal wall. This may produce discharge and minimal amount of bleeding. The patient should be reassured that this is benign and self-limiting. They should see their health care professionals within a reasonable period of time. Use of local oestrogen for one to two weeks after removal of the pessary is usually sufficient to stop the bleeding. Unexplained bleeding would require a work up to exclude endometrial pathology.

Very rarely, a vaginal pessary is retained and forgotten to be removed. It may not be symptomatic until it causes serious complications. It will eventually be embedded and epithelialised. Removal is difficult, potentially hazardous and may require anaesthesia. Migration to the peritoneal cavity, urinary bladder and rectum is possible.

Fitting and care of pessaries

A pelvic examination should be performed before the insertion of any pessary. The prolapse is staged according to the POP-Q system. Any urinary incontinence is noted with the Valsalva manoeuvre. The health of the vaginal skin is assessed. The prolapse should be reduced manually before the insertion of the pessary. The size of the pessary is determined by a bimanual examination. The length of the vagina as measured by the vaginal finger from the posterior fornix to the pubic symphysis and the calibre of the vagina as gauged by spreading the index and middle fingers

horizontally at the level of the cervix or vaginal vault will determine the appropriate pessary size. On average, more than two different sizes of the pessary are tried before the correct one is chosen.

A ring pessary should be lubricated and squeezed or folded before insertion to reduce discomfort. Then the patient should be asked to perform a Valsalva manoeuvre to test the fitness. She should not feel the pessary if the size is correct. If the pessary descends to the introitus or is expelled, a larger or different kind of pessary is recommended. With the pessary in-situ, a finger should be able to insert between it and the vaginal wall without much discomfort. Finally the patient is asked to perform another Valsalva manoeuvre in an upright position and walk around to test for any discomfort. She should be able to void normally with the pessary in-situ before she leaves the clinic.

Local oestrogens may be needed for a few weeks if the vagina is atrophic, before or after the insertion.

The follow up schedule after the first insertion is highly variable. Wu et al[1] recommended an initial follow up at two weeks, followed by three-monthly visits in the first year and then half-yearly thereafter if no complications arise. The pessary was removed for washing before replacement and the vagina was inspected for erosion and infection at each visit. The complication rate in this series was low. Clemons[2] et al reported a similarly low complication in his series in which patients managing their own pessaries were followed up at six to twelve month intervals while those requiring their doctors for pessary care were followed up at two month intervals.

Conclusion

Studies confirmed that patients who can successfully be fitted with a vaginal pessary for pelvic organ prolapse will continue to use it in up to 73% in the first year and 53% in three years[1]. It is recommended to be used in all patients presenting with pelvic organ prolapse as a first line management. Recently there is evidence that pessary use may prevent the progression of prolapse. Handa et al[3] reported a significant improvement from baseline in POP-Q stage after pessary use, even when the pessary had been removed for up to 48 hours.

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Dermatological Quiz

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Fig.1: Erythema and swelling at face and neck

Fig.2: Erythema and lichenification at both upper limbs

A 60-year-old lady complained of itchy skin rash over her face and upper limbs for one month. There were no arthralgia, muscle weakness or fever. She was otherwise well in the past except that she had epilepsy diagnosed two months ago.

Questions

1. What would be your spot diagnosis?
2. What important question would you ask in the history which may immediately give a clue to the underlying cause?
3. What are the other possible underlying causes that must be excluded?
4. How do you treat this patient?

(See P.36 for answers)

Surgical Treatment of Pelvic Organ Prolapse

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Introduction

Pelvic organ prolapse (POP) is a common problem in women which can significantly impair their quality of life[1]. With the ageing population in Hong Kong, we are expecting higher demand from this problem. POP is associated with a number of complications, e.g. urinary symptoms, bowel symptoms and even hydronephrosis[2]. Treatment modalities for POP include pelvic floor exercise[3], vaginal pessary[4] and surgery. A wide variety of abdominal and vaginal surgical techniques are available for the treatment of prolapse. Different surgical procedures are decided according to different compartments: anterior vaginal, apical and posterior vagina. A combination of some of these procedures may be employed in the surgical correction of prolapses as frequently more than one type of prolapses may occur.

Anterior compartment

Anterior compartment prolapse is any descent of the anterior vaginal wall, the most common is the bladder i.e. cystocoele. Anterior colporrhaphy is the most commonly performed procedure for anterior vaginal wall repair. This procedure is to dissect away the bladder from the anterior vaginal wall and then stitches are put to plicate the underneath fibromuscular fascia to repair the cystocoele. The vaginal mucosa is then trimmed and the anterior vaginal wall is closed. The risk of recurrence of anterior compartment prolapses was reported to be 40% or more in 1-2 years after operation.[5,6] Therefore, reinforcement with a mesh is introduced.

Reinforcement of anterior vaginal wall repair can be done using a biological graft, an absorbable synthetic mesh or a non-absorbable synthetic mesh. For non-absorbable synthetic meshes, it is recommended to use type I mesh of monofilament polypropylene meshes, with large-pore size (>1 mm^2), lightweight (<45 g/m2), and lower stiffness.[7] The mesh is put between the vaginal mucosa and the bladder permanently. According to the Cochrane review published in 2015, there was limited evidence to draw any conclusion regarding absorbable meshes or biological grafts compared to native tissue repair. For transvaginal permanent meshes, it is associated with lower rates of awareness of prolapse, reoperation for prolapse, and prolapse on examination than native tissue repair; it is also associated with higher rates of reoperation for prolapse, stress urinary incontinence, or mesh exposure and higher rates of bladder injury at surgery and de novo stress urinary incontinence. The risk-benefit profile means that a transvaginal mesh has limited utility in primary surgery. In 2011, US Food and Drug Administration released their warning of the possible risks of transvaginal meshes and since then, many mesh companies withdrew from the market. While it is possible that in women with higher risks of recurrence, the benefits may outweigh the risks. And synthetic mesh repair should only be considered in well selected cases and conducted by experienced surgeons.

Posterior compartment

Posterior compartment prolapses include rectocoeles and enterocoeles. The posterior vaginal wall repair can be performed by applying sutures to the rectovaginal fascia at the midline of the posterior vaginal wall with interrupted absorbable sutures or repairing the rectovaginal septum defect if identified. For the use of the mesh material, when comparing native tissue repair and posterior repair with absorbable or non-absorbable meshes, there were no differences in the rates of recurrence or the cure rates, patient satisfaction or subjective improvement between the two groups at 1 year[6, 8]. There were no complications associated with the use of meshes. However, there may be risks of mesh erosions and an increase in the dyspareunia rate postoperatively[9]. It was therefore concluded that there was not enough evidence to support the use of meshes for the posterior compartment repair[10].

Apical compartment: uterine prolapse or vaginal vault prolapse

Uterine prolapse

Vaginal hysterectomy is the common surgical treatment offered to women with uterine prolapse who have completed their family. After completion of vaginal hysterectomy, additional procedures may be performed to suspend the vaginal vault and prevent recurrence of vaginal vault prolapse, including McCall culdoplasty or sacrospinous ligament fixation (SSLF). The McCall culdoplasty is a procedure to suture the uterosacral and cardinal ligaments to the peritoneal surface of the vaginal wall. This procedure closes off the cul-de-sac, draws the posterior vaginal apex up to the supporting structures and elevates it[11]. Suturing the uterosacral and cardinal ligaments to the vaginal cuff is recommended at the same time to prevent vault prolapse and later enterocoele[12]. SSLF is a procedure to suspend the vaginal vault to the sacrospinous ligament near the ischial spine using long-acting absorbable sutures[11]. This is recommended when the vault descends to the introitus

during closure of the anterior vaginal wall at the end of vaginal hysterectomy. SSLF carries a risk of pudendal vascular or nerve injury. Both McCall culdoplasty and SSLF may shorten the vaginal length; however, these changes were not shown to affect sexual function in women[13]. Generally, McCall culdoplasty is performed for women with vaginal cuffs up to the hymen level, while SSLF is reserved for women with more severe prolapse.

Traditionally, hysterectomy was performed for women with POP even though the uterus was histologically normal. Uterus-preserving prolapse surgery is gaining more awareness recently. Women may have a desire to preserve their uterus for various reasons, such as the concern of female sexuality and body image. Vaginal and abdominal hysteropexy are available options.

Sacrospinous hysteropexy is a vaginal procedure to suture the cervix to the unilateral sacrospinous ligament. A clinical trial compared this procedure with vaginal hysterectomy[14]. No operative complications were reported for sacrospinous hysteropexy. The lengths of stay in hospital and return to working activities were shorter in the sacrospinous hysteropexy group. However, the reported rate of 57% of women needing more than 3 months to recover in the vaginal hysterectomy group was regarded as longer than our clinical experience. There were more recurrent apical prolapses reported in the sacrospinous hysteropexy group (21% vs 3%) and 6% required repeat surgeries by one year. Six successful pregnancies and vaginal deliveries have been reported in 5 out of 19 patients[15]. Out of the five women, normal anatomic restoration was accomplished after pregnancy and vaginal delivery in all but one woman.

Sacrohysteropexy is an abdominal procedure to suspend the uterus to the anterior longitudinal ligament of the sacral promontory using a piece of synthetic mesh. It can be performed by laparotomy or laparoscopic approach[16,17]. From current evidence, the reported recurrency rate of uterine prolapse was low and the patient satisfaction rate was high[16].

The Manchester operation is a vaginal procedure which includes diagnostic uterine curettage; amputation of the cervix; suturing and reattachment of both the cardinal and uterosacral ligaments to the anterior aspect of the uterine isthmus; and covering of the cervical stump with vaginal mucosa[18]. Post-operative urinary retention and cervical stenosis were reported[18,19]. High cure rates of 93-100%, 95% and 99-100% in the apical, anterior and posterior compartments respectively were reported. The reoperation rate for recurrence of prolapse was low (18, 19) Pregnancies and successful deliveries have been reported[18,20]. This surgery can be an option for young women who still desire for future pregnancies.

There was no evidence comparing different uterine-preserving prolapse surgeries. The option offered to women would depend on the expertise of the surgeons and should only limit to women who have no uterine and cervical pathology. If women were asymptomatic of abnormal per vaginal bleeding, they should have Pap smear screening before the operation and advised to continue Pap smear surveillance according to the local surveillance programme after the operation. Although successful pregnancies and vaginal deliveries have been reported after sacropinous hysteropexy and Manchester operation, women should be advised about the limited information on the risks of pregnancy and delivery, and potential recurrence of prolapse.

Post-hysterectomy vaginal vault prolapse

Apical compartment prolapses include vaginal vault prolapses after hysterectomy. As described above, sacrospinous ligament fixation (SSLF) is one of the surgical options to correct vaginal vault prolapse. It has the advantage of being a vaginal procedure, which can be performed under regional anaesthesia, rather than general anaesthesia.

Another surgical option is sacrocolpopexy. This is an abdominal procedure using a piece of synthetic mesh to suspend the anterior and posterior vaginal walls to the anterior longitudinal ligament of the sacral promontory. At the anterior longitudinal ligament of the sacral promontory, non-absorbable or helical tackers are used to anchor the mesh. Laparoscopic sacrocolpopexy was first published in 1994[21]. Generally, laparoscopic surgery was associated with less operative blood loss, lower transfusion rate, shorter length of hospital stay when compared with open surgery and the conversion rate to laparotomy is low. Although laparoscopic sacrocolpopexy is an option to treat vaginal vault prolapse, it has a long learning curve[22]. Robotic-assisted laparoscopic sacrocolpopexy was introduced in 2004[23]. Although it had comparable complication rates as traditional laparoscopic sacrocolpopexy and the short term outcomes were similar, the mean operative time was longer in the robotic-assisted group and the cost of using robotic-assistance was also significantly higher[24]. The role of robotic-assisted laparoscopic sacrocolpopexy is yet to be discerned.

According to the Cochrane review published in 2008 comparing abdominal sacrocolpopexy versus vaginal sacrospinous colpopexy (SSLF), abdominal sacrocolpopexy was better than vaginal SSLF in terms of a lower rate of recurrent vaginal vault prolapses (RR 0.23, 95% CI 0.07-0.77) and less post-operative dyspareunia (RR 0.39, 95% CI 0.18 to 0.86) [25,26]. However, the abdominal sacrocolpopexy had a longer operative time and higher cost[25,26]. There was no difference in the re-operation rate between the two surgeries[27].

Colpoclesis is an obliterative surgical procedure for the correction of POP for women who are sexually inactive. LeFort's original description called for the creation of 2 trapezoids of the anterior and posterior vaginal epithelium with subsequent imbrication creating a tissue platform. The cut edges of the anterior and posterior vaginal walls are sewn together with interrupted delayed absorbable sutures. By doing so, the uterus and vaginal apex are gradually turned inward and the inferior margin is sutured after plication of the bladder neck. The remaining lateral vaginal epithelium is contiguous with the cervix and creates 2 lateral tunnels, permitting postoperative drainage as well as a channel for any postmenopausal bleeding remote from surgery. Ninety percent of women had good anatomic results, 85% had symptoms relieved[28]. Postoperative urinary stress and incomplete bladder emptying were reported[29,30]. On

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Managing Adult ADHD

Date : 29 May 2017 (Monday)
Time : 1:00pm-2:45pm
Venue : 38/F, World Trade Centre Club Hong Kong, World Trade Centre, 280 Gloucester Road, Causeway Bay, Hong Kong
Language: Cantonese (Supplemented with English)

Speaker:	Dr. Candy HY LIN Specialist in Psychiatry
Chairman:	Dr. Yin-Kwok NG Consultant Psychiatrist, Kwai Chung Hospital Executive Committee Member, The Federation of Medical Societies of Hong Kong
Rundown :	1:00pm Reception 1:30pm Managing Adult ADHD Symposium & Lunch
Capacity :	50 (Priority will be given to doctors on first-come-first serve basis)

Registration: Interested parties please complete the application form and fax to 2865 0345 or email to vienna.lam@fmshk.org on or before **22 May 2017 (Monday)**

Enquiry: Ms. Vienna Lam of the Secretariat at 2527 8898

CME has been applied and pending confirmation

Application form can be downloaded from website: http://www.fmshk.org

one hand, there was significant improvement not only in symptoms and quality of life of prolapse, but also in terms of the body image; on the other hand, the rate of regret or dissatisfaction was reported to be 10%[30]. It will be difficult to evaluate any future uterine bleeding or cervical pathology, therefore, endometrial biopsy and Pap smear must be considered before surgery; and these limitations should be explained to the women.

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Pelvic Floor Disorders Related to Pregnancy and Delivery

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Pelvic floor disorders include urinary incontinence (UI), pelvic organ prolapse (POP), and faecal incontinence (FI). A previous local study found 30-40% of middle-aged women reported symptoms of UI.[1] POP was reported in 12-32% of women.[2-3] There are limited local data on the prevalence of POP and FI in the general population. It is common for several pelvic floor disorders to co-exist in the same woman.[4-5] Women who suffer from pelvic floor disorders have impaired quality of life.[5-6]

Childbirth has been one of the important aetiologies of pelvic floor disorders. In overseas' studies and one study in the China Mainland, the estimated prevalence of UI was 16-60% during pregnancy and 16-34% after delivery.[7-9] FI was reported by 5-22% of women after delivery.[8,10] POP was also reported by over 80% of women shortly after caesarean and vaginal delivery.[9] Indeed, with the effect of hormonal changes and the increasing size of the gravid uterus during pregnancy, the pelvic floor of women have been shown to undergo changes during pregnancy, that is before the childbirth.[11-12]

This article aims at reporting the local findings on pelvic floor disorders during pregnancy and after delivery of Hong Kong Chinese women. Similarities and differences with overseas' studies would be discussed. This information would be helpful to health care workers in counselling women on this issue.

A prospective observational study was conducted in 2009-2012.[11-12] Chinese nulliparous women who carried a singleton pregnancy without symptoms of pelvic floor disorders before pregnancy were recruited. They were assessed at each trimester of pregnancy and at postnatal 8 weeks, 6 and 12 months. Their symptoms of pelvic floor disorders were explored with standard Chinese validated questionnaires, namely Pelvic Floor Distress Inventory and Pelvic Floor Impact Questionnaire, during the above 6 visits.[13-14]

In all, 328 women completed the study. Their mean age was 30.6±3.8 years and the mean body mass index (BMI) was 21.0±2.8 kg/m2 in the first trimester. Figure 1 showed the prevalence of reported symptoms of stress urinary incontinence (SUI), urge urinary incontinence (UUI), prolapse (POP) and faecal incontinence (FI) during pregnancy and after delivery.

The prevalence of SUI, UUI and POP was significantly increased with more advanced gestation.[13] Significantly more women who had SUI at the first trimester had SUI at the third trimester (82% vs 32%, p<0.001).[11] A higher maternal age was associated with antenatal SUI and UUI.[11] On multivariate analysis, the maternal age was a risk factor for antenatal SUI (Odds ratio 1.08).[11] A higher maternal weight and BMI were associated with FI.[11] Weight gain during pregnancy was not associated with antenatal UI or FI.[11] The prevalence of antenatal UI during the first, second and third trimester of pregnancy was similar to the respective prevalence of 8.3%, 32% and 35% in Caucasian nulliparous women who were continent before the pregnancy.[15] The prevalence of antenatal SUI, UUI and FI in the local study at different trimesters was also similar to previous findings. About 52-53% of women remained continent. Similar to previous findings, a higher maternal age was a risk factor for antenatal SUI, increasing maternal weight and higher BMI were risk factors for FI.[15-17]

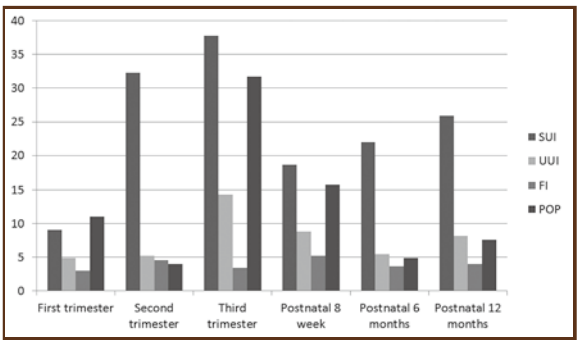

Figure 1. Prevalence of pelvic floor disorders during pregnancy and after first delivery

FI faecal incontinence to solid/liquid stool, POP pelvic organ prolapse, SUI stress urinary incontinence, UUI urge urinary incontinence

Among the 328 women, 192 (59%), 60 (18%), 13 (4%) and 63 (19%) had normal vaginal deliveries (VD), instrumental deliveries (46 vacuum extractions and 14 forceps deliveries), elective and emergency caesarean sections (CS), respectively. The mean gestational age at delivery was 39.2±1.8 weeks and the mean birth weight was 3.09±0.47 kg.[15] The prevalence of postnatal UI and FI according to the mode of delivery is shown in Table 1. The prevalence of SUI and UUI was 25.9% (95% CI 21.5-30.6) and 8.2% (95%CI 5.2-11.2) at 12 months after delivery. In VD, the respective prevalence was 29.7% and 9.1%. Of those who reported SUI at 8 weeks, 44% had symptoms resolved by 12 months. Of those who reported SUI at 12 months, 39% reported such symptoms at 8 weeks after delivery. Only 13% and 7% of those who reported SUI and UUI at 12 months had moderate or severe symptoms. The prevalence of FI of

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Table 1 Prevalence of UI and FI after the first delivery according to the mode of delivery

	8 weeks		P-value	6 months		P-value	12 months		P-value
	VD n=252	CS n=78		VD n=252	CS n=78		VD n=252	CS n=78	
SUI	56 (22.2)	5 (6.4)	0.002	62 (24.6)	10 (12.8)	0.035	74 (29.4)	11 (14.1)	0.009
UUI	27 (10.7)	2 (2.6)	0.03	15 (6.0)	3 (3.8)	0.77	23 (9.1)	4 (5.2)	0.28
FI	16 (6.3)	1 (1.3)	0.14	11 (4.4)	1 (1.3)	0.31	11 (4.4)	2 (2.6)	0.74

FI faecal incontinence to solid/liquid stool, CS caesarean section, SUI stress urinary incontinence, UI urinary incontinence, UUI urge urinary incontinence, VD vaginal delivery
Values are presented in number (percentage).
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solid/liquid stool at 12 months was 4.0% (95% CI 1.9-6.1); only one had moderate degree. VD was associated with a higher prevalence of SUI after delivery; but there was no difference between normal VD and instrumental delivery (29.7% vs 28.3%). The mode of delivery was not associated with FI. The factors affecting SUI, UUI and FI are listed in Table 2. Multivariate analysis showed that VD (odds ratio 3.6), antenatal SUI (OR 2.8) and antenatal UUI (OR 2.4) were risk factors of SUI at 12 months after first delivery. The risk factors of UUI at 12 months were antenatal UUI (OR 6.4) and maternal BMI at the first trimester of pregnancy (OR 1.2); while that for FI was antenatal FI (OR 6.1).

Table 2 Multivariable logistic regression in prediction of SUI, UUI and FI in women at 12 months after their first delivery

	Odds ratio	95.0% C.I.		P-value
SUI		Lower	Upper	
Vaginal delivery	3.58	1.57	8.14	0.002
Antenatal SUI	2.81	1.48	5.32	0.002
Antenatal UUI	2.35	1.13	4.92	0.023
Maternal age (years)	1.10	1.0	1.19	0.05
Maternal BMI at 12 months after delivery (kg/m_2)	1.11	0.94	1.33	0.20
Maternal BMI at first trimester (kg/m_2)	1.05	0.84	1.30	0.68
UUI				
Antenatal UUI	6.44	2.52	16.43	<0.005
Maternal BMI at first trimester	1.21	1.06	1.38	0.006
Antenatal SUI	2.00	0.74	5.40	0.17
Maternal age	1.05	0.93	1.18	0.47
FI				
Antenatal FI	6.1	1.75	21.5	0.005
Maternal BMI at first trimesters (kg/m_2)	1.18	0.99	1.39	0.06

BMI body mass index, FI faecal incontinence to solid/liquid stool, SUI stress urinary incontinence, UUI urgency urinary incontinence.
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The prevalence of postpartum UI after the first delivery in the local study was similar to the pooled prevalence of UI 25.5%, SUI 12% and UUI 3% from previous Caucasian studies, though most reported the prevalence up to 6 months after delivery.[18-20] Many previous studies reported VD as a risk factor for postpartum UI or SUI.[4, 16] However, other obstetric factors, such as duration of labour, infant's birth weight were not associated with SUI or UUI. The prevalence of postnatal FI was 4%, which is similar to the reported prevalence. The effect of episiotomy on postnatal FI remains controversial.[21-22] The findings of antenatal UI or FI being a risk factor for postnatal UI or FI suggested that the pathophysiology of UI, SUI or UUI, and FI begins during pregnancy, before the onset of labour or delivery.

A follow-up study, including the above women and another cohort of 289 Hong Kong Chinese primiparous women who had their first delivery by instrumental delivery (247 vacuum extractions and 42 forceps deliveries), was conducted to assess their symptoms of pelvic floor disorders at 3-5 years after their first delivery.[23] In all, 506 women completed the study. The mean duration from first delivery to the follow-up study was 43 months (range 32-66 months). Figure 2 showed the prevalence of UI, FI and POP of women according to their parity and mode of deliveries.

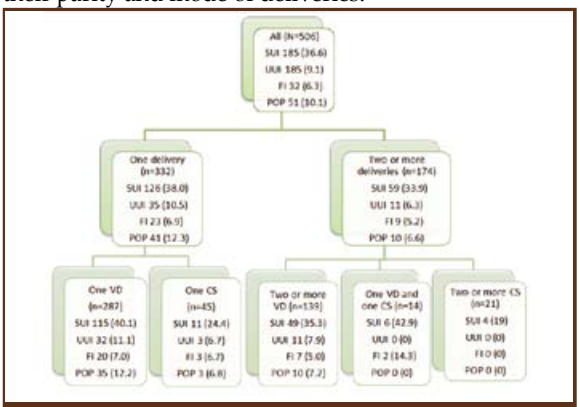

Figure 2. Prevalence of pelvic floor disorders at 3-5 years after the first delivery

CS caesarean section, FI faecal incontinence to solid/liquid stool, POP pelvic organ prolapse, SUI stress urinary incontinence, UUI urge urinary incontinence, VD vaginal delivery
Data presented in number (percentage)

In primiparous women, more reported SUI (40.1 vs 24.4%, P=0.045) in the VD group compared to the CS group. There was a trend of higher prevalence for UUI, FI and POP in the VD group compared to the CS group, but none reached statistical significance. Among the multiparous women, there was a trend of higher prevalence of all pelvic floor disorders in the VD group when compared to the CS group; however, none reached statistical significance. When comparing women who ever had VD and who never had VD, there were significantly more women reported SUI (39 vs 22%, P=0.010). When comparing women who had one VD and who had ≥2 VD, surprisingly, there were a higher prevalence of all symptoms of PFD in the one VD group, but it only reached statistical significance for POP (12% vs 7%, P=0.016). Significantly more women who ever had instrumental delivery reported symptoms of POP when compared with normal VD (normal VD only 6% vs ever VE 13% vs ever forceps 18%, P=0.016).

The association of UI, FI and POP with various factors including age, ever VD, BMI or body weight at the first trimester of first pregnancy, current body weight and BMI, weight gain since the first trimester, gestation at delivery, the heaviest infant's birth weight, baby's head circumference, duration of the second stage of labour, episiotomy rate were studied. For SUI, a higher current body weight (OR 1.18) was found to be the only risk factor. Maternal weight gain since the first trimester was the only risk factor for UUI (OR 1.33). Instrumental delivery increased the risk of POP (OR 2.7).[23]

In this follow-up study, the prevalence of UI among women who had one to ≥2 VD was 36 to 42%, which is comparable to a 12 years longitudinal study.[24] The prevalence of FI was comparable to previous study.[25] The prevalence of POP was 10%; this was comparable to previous report at 15-23 years after the first delivery.[26] VD was a risk factor for UI, FI and POP.[24-26] There was a trend of more UI, FI and POP in women with VD compared to women with CS in the local study, although it did not reach statistical significance except for SUI. More women who had instrumental delivery reported symptoms of POP. Multiparity was reported as a risk factor for UI and FI.[24, 27] However, this was not demonstrated in the local study. Surprisingly, the prevalence of UI and POP is higher in women with one VD than compared to women with ≥2VD. BMI at the first trimester was a risk factor for UUI at 42 months. A higher current body weight is associated with SUI, UUI and mixed UI. This was comparable to other studies.[24, 28] Weight control can potentially reduce the risk of UI.

Pelvic floor exercise or pelvic floor muscle training (PFMT) is commonly recommended to women during pregnancy and after delivery. According to the Cochrane review, in terms of prevention, continent pregnant women who had intensive antenatal PFMT were less likely to report UI up to 6 months after delivery (risk ratio 0.7). Women who have UI after delivery and performed PFMT were less likely to report UI 12 months after delivery (RR 0.6). However, if included women with and without UI in late pregnancy or after delivery, PFMT did not reduce incontinence rates after delivery.[29] There was limited evidence about long-term effects for UI.[29]

In conclusion, both pregnancy and delivery have exerted some effects on women. Women may have onset of symptoms of pelvic floor disorders during pregnancy or after delivery. By 3-5 years after the first delivery, more women who ever have VD reported SUI. Weight control is a potentially modifiable risk factor for SUI and UUI. Women who have UI after delivery and performed PFMT were less likely to report UI 12 months after delivery.

Acknowledge

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Bladder Pain Syndrome

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INTRODUCTION

The bladder pain syndrome (BPS), previously known as interstitial cystitis (IC), is a chronic disease characterised by persistent irritating micturition symptoms and pain. Recently, the American Urological Association has defined BPS as 'an unpleasant sensation (pain, pressure, discomfort) perceived to be related to the urinary bladder, associated with lower urinary symptoms of more than six weeks duration, in the absence of infection or other identifiable causes.'[1]

EPIDEMIOLOGY

Since BPS is now described as a diagnosis of exclusion with no objective test to establish its presence, it is difficult to estimate the prevalence. The use of different methods (self-reported studies, symptoms assessments versus clinician diagnosis) yields widely disparate prevalence estimates. Berry et al.[2] used the questionnaire to determine prevalence of IC/BPS among adult females in the US. This study yielded prevalence estimates of 2.7% to 6.53% (approximately 3.3 to 7.9 million US women age 18 or older). Only 9.7% of women who met the definitions reported having been given an IC/BPS diagnosis.

AETIOLOGY

The pathogenesis and aetiology of BPS remain incompletely defined. However, there is an emerging consensus as to the central role of epithelial dysfunction, bladder sensory nerve-up regulation and mast cell activation in the genesis of BPS.

Epithelial dysfunction

The urothelial surface is lined by an impermeable bladder surface mucin composed of sulfonated glycosaminoglycans (GAGs) and glycoproteins. Changes in this surface cause permeability alterations which allow potassium ions to traverse the urothelium, depolarise sensory and motor nerves, and activate mast cells.[3] The rationale for the use of 'epithelial coating' drugs, such as pentosan polysulfate and intravesical heparin or hyaluronic acid, is their effect on surface epithelial function. Some BPS patients relate their onset of symptoms to episodes of bacterial cystitis. Bacteria can become sequestered within urothelial cells and cause permeability alterations.[4]

Neuro-Urothelial interactions

Apart from its barrier function, the urothelium acts as a 'mechanical sensor' of bladder distension and a 'chemical sensor' of urine acidity, osmolality, and composition.[5] C-fibre afferent nerves in the submucosa penetrate the urothelium and may mediate these functions. Substance P, a tachykinin released by activated C-fibre afferents, is involved in nociception in the central and peripheral nervous systems and also functions as an inflammatory mediator. Its release results in an inflammatory cascade with mast cell activation and up-regulation of adjacent nerves (sensory, autonomic, motor). There is an increased numbers of substance P-containing nerves and substance P receptor (neurokinin-1) mRNA in BPS patients, which confirms the role of neurogenic inflammation in BPS. [6]

Mast cells activation

Mast cells contain vasoactive and inflammatory mediators (e.g. histamine, leukotrienes) which are important in the pathogenesis of neuroinflammatory conditions, including BPS. Mastocytosis occurs in 30-65% of BPS patients. There is an increased level of histamine, histamine metabolites and tryptase in BPS patients. Thus, antihistamines (e.g. hydroxyzine) and leukotriene inhibitors are used in the treatment of BPS.[7,8]

Autoimmunity and infection

BPS has many features of an autoimmune disease – chronicity, exacerbations and remissions, clinical response to steroids and immunosuppressives, the high prevalence of antinuclear antibodies, and association with other autoimmune syndromes.

Cultures in BPS patients are routinely negative, and polymerase chain reaction (PCR) studies have not consistently identified bacterial genetic material in BPS.[9] However, an episode of cystitis can cause bladder dysfunction which results in alterations in bladder permeability, neurogenic up-regulation and mast cell activation.

An Integrated Hypothesis

No single pathological process is universally present in BPS. BPS may have multiple aetiologies which cause the symptoms of irritative voiding and pain. Changes in urothelial permeability, sensory nerve stimulation, and mast cell activation are interrelated with multiple positive and negative feedback loops occurring simultaneously. This vicious cycle contributes to the chronicity of BPS and its poor response to single-drug treatment.

PRESENTATION

BPS is most commonly diagnosed in the fourth decade or after. A history of a recent culture proven UTI can be identified on presentation in 18-36% of women, although subsequent cultures are negative.[10] Most patients report a single symptom at the beginning (such as dysuria,

frequency or pain), with subsequent progression to multiple symptoms.[11,12] Symptoms will suddenly intensify for several hours, days or weeks during flare up. There is a high rate of prior pelvic surgery (especially hysterectomy) and levator ani pain in women with BPS, which may indicate the contribution of trauma or other local factors to symptoms, or it is just a result of a missed diagnosis.[13]

Some conditions are commonly associated with BPS, such as fibromyalgia, irritable bowel syndrome, chronic fatigue syndrome, Sjogren's syndrome, chronic headaches and vulvodynia. These associations suggest that there may be a systemic dysregulation in some patients.[14,15] Finally, patients with BPS frequently exhibit mental health disorders, such as depression and anxiety. This can be reactive in some BPS patients, but at the same time there may be a genetic linkage between BPS and these mental conditions.[16,17]

Pain (including sensations of pressure and discomfort) is the hallmark symptom of BPS. Typical BPS patients report not only suprapubic pain related to bladder filling, but pain throughout the pelvis, including in the urethra, vulva, vagina and rectum, and in extra-genital locations such as the lower abdomen and back.[10,18] The pain usually worsens with specific foods or drinks and/or with bladder filling, but improves with urination.[10]

Typical BPS patients may also present with marked urinary urgency and frequency. Voiding frequency is almost universal (92% of one population),[18] but does not distinguish the BPS patients from other lower urinary tract disorders. Change in urinary frequency is valuable to evaluate response to therapy but is of little help in diagnosis. Urinary urgency is also extremely common (84% of the same population).[18] BPS patients may experience a more constant urge to void, which is different from the symptoms in overactive bladder as a 'compelling need to urinate which is difficult to postpone.' Typically BPS patients void to avoid or to relieve pain, whereas overactive bladder patients void to avoid incontinence. Symptoms of urinary urgency and frequency may precede symptoms of pain. Median time to the development of a full symptom complex of frequency, urgency and pain was reported to be two years in one study.[12]

ASSESSMENT

As BPS is a chronic pain syndrome, the principles of management of chronic pain should be used for the initial assessment of this condition. A thorough medical history should be taken to rule out other possible causes of bladder pain. The location of the pain and the relationship to bladder filling and emptying should be established. The characteristics of the pain, including trigger factors and onset, correlation with other events and description of the pain (ranges from pressure and aching to burning sensation), should be explored.

Physical examination should be performed to rule out bladder distension due to urinary retention, hernias and painful trigger points on abdominal palpation. A genital examination should be carried out to look for atrophic changes, dermatosis, prolapse, vaginitis and trigger point tenderness over the urethra, vestibular glands, vulvar skin or bladder. Any superficial or deep vaginal tenderness and tenderness of the pelvic floor muscles should be noted during the examination. Cervical pathology should be excluded. A bimanual pelvic examination should be performed to rule out abdominal, cervical or adnexal pathology.

INVESTIGATION

Since BPS is a diagnosis of exclusion, other conditions with similar symptomatology should be ruled out. The European Society for the Study of BPS (ESSIC) has published a list of differential diagnoses, by expert consensus.[19] These include:

- Malignancy, e.g. bladder carcinoma/ carcinoma in situ, cervical, uterine or ovarian cancer
- Infection of the urinary or genital tract
- Overactive bladder
- Radiation cystitis or drug-mediated cystitis, e.g. cyclophosphamide, ketamine
- Bladder outlet obstruction or incomplete bladder emptying
- Calculus of the bladder or lower ureter
- Urethral diverticulum
- Pelvic organ prolapse
- Endometriosis
- Pudendal nerve entrapment or pelvic floor muscle-related pain
- Irritable bowel syndrome
- Diverticular disease of the bowel

A 3-day bladder diary should be completed, so as to identify the severity of the storage symptoms, reinforce the behavioural strategies, as well as to assess the response to pharmacological treatment. A food diary is important in identifying those specific foods which can cause a flare-up. Urine should be tested for culture and sensitivity to rule out urinary tract infection. In patients with sterile pyuria, urinary Ureaplasma and Chlamydia should be considered. Urine cytology and cystoscopy examination are indicated in those who have persistent microscopic haematuria.

Cystoscopy does not confirm or exclude the diagnosis of BPS, but is required to diagnose or exclude other conditions that mimic BPS. Bladder biopsies and hydrodistension are not recommended for the diagnosis of BPS. Potassium sensitivity test, urodynamic assessment and urinary biomarkers should not be used in the diagnosis of BPS as well. Urodynamic tests, however, may be considered if there is coexisting overactive bladder, urinary incontinence or voiding dysfunction that are not responsive to treatment.

Validated symptom scores (e.g. The University of Wisconsin IC Scale, The O'Leary-Sant IC Symptom Index and IC Problem Index, the Pelvic Pain and Urgency/ Frequency Scale) can be used to assess baseline severity of BPS as well as the response to treatment. The use of visual analogue scales for pain should be considered to assess the severity of pain in BPS.

MANAGEMENT

Conservative treatments

Dietary modification can be beneficial and avoidance of caffeine, alcohol, and acidic foods and drinks should be

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considered.[10] Stress management and regular exercise should be recommended.[20] Simple analgesics, such as paracetamol and ibuprofen, can be used for treating the pelvic or bladder pain. Early referrals to a pain clinic should be considered in those with refractory symptoms.

Pharmacological treatments

Oral amitriptyline or cimetidine may be considered when first-line conservative treatments failed.[21,22] Cimetidine is currently not licensed for the treatment of BPS and should only be commenced by a clinician specialised to treat this condition. Multimodal therapy may be considered if single drug treatment is unsuccessful.

Oral hydroxyzine and pentosan polypsulfate do not appear to be effective in treating BPS.[23,24] Long-term antibiotics and oral glucocorticoids are not recommended for BPS.[25,26]

Intravesical treatments

If conservative and oral treatments have been unsuccessful, intravesical therapies may be added or substituted. Options include intravesical lidocaine, hyaluronic acid, dimethyl sulfoxide (DMSO), heparin, chondronitin sulfate and intravesical injection of botulinum toxin A (Botox). The treatment of choice will depend on the experience and expertise of the clinical team involved. A meta-analytical review shows evidence of the positive effects of intravesical GAG therapy for BPS and such treatment may significantly improve patients' symptoms.[27]

However, intravesical resiniferatoxin, intravesical Bacillus Calmette-Guerin and high-pressure long-duration hydrodistension are not recommended for BPS.

Further treatment options

The Hunner lesion is a distinctive inflammatory lesion on cystoscopy, presenting a characteristic deep rupture through the mucosa and submucosa provoked by bladder distension. These lesions do not respond to oral treatments. Cystoscopic fulguration and laser treatment, and transurethral resection of the lesions should be considered at an early stage.[28]

Neuromodulation (either posterior tibial or sacral nerve stimulation), cystoscopy with low-pressure hydrodistension and oral cyclosporine A may be considered after conservative, oral and/or intravesical treatments have failed.[29-32] Major surgery (total cystectomy and urinary diversion) may be considered as last-line treatment in refractory BPS.[33]

Multidisciplinary care with physiotherapists, pain teams and clinic psychologists may be beneficial to BPS patients, especially for those with refractory symptoms. Patient organisations should be introduced to provide support, to share experiences, and to promote self-help management.

CONCLUSION

BPS is a chronic pain syndrome which is diagnosed by exclusion. A multidisciplinary team involvement is essential for the best care of such patients.

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Pelvic Floor Exercises and Bladder Training

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Pelvic Floor Exercises

1. What are pelvic floor muscles?

The pelvic floor muscles are composed of multiple layers of muscles and ligaments which extend from the coccyx to the pubic bone at the front. These muscles form a hammock shape and help to support the bladder, uterus and rectum. They also help to close the bladder and bowel outlets. The pelvic floor muscles are kept firm and slightly tense to stop urinary and faecal leakages and relaxed during voiding or having bowel motions. They also actively contract during coughing, sneezing, laughing or lifting to prevent leakages. However, in some women, the pelvic floor muscles weaken due to childbirth or ageing. These weakened muscles may lead to bowel and urinary incontinence and uterine prolapse.

2. How to prevent pelvic floor muscle weakening?

Pelvic floor muscle weakening can be prevented by:

2.1 Performing pelvic floor exercises.

2.2 Reducing lifting or pushing of heavy objects.

2.3 Avoiding constipation by developing good eating habits through drinking more water, eating fibrous foods, such as vegetables and fruits and maintaining a regular bowel habit.

2.4 Developing a good habit by voiding only when there is an urge. During voiding, try to relax in order to clear the urine.

2.5 Avoiding the habit of clearing the bladder before going out.

2.6 Seeking medical treatment for those who have a chronic cough.

2.7 Managing the body weight appropriately in the obese.

3. What are the benefits of pelvic floor exercises?

The benefits include:

3.1 The strengthening of pelvic floor muscles and maintaining their toughness.

3.2 An improvement on stress incontinence which can reduce urine leakage during coughing, sneezing and exercising.

3.3 The lessening of urge sensations in urge incontinence.

3.4 A reduction in the laxity of pelvic floor muscles caused by the lack of female hormones after menopause.

3.5 The tightening of the pelvic floor muscles of postnatal women.

4. How, when and where should pelvic floor exercises be performed?

There are two types of pelvic floor exercises which train the muscle fibres through slow and fast contractions.

4.1 The slow contractions of the muscle fibres

4.1.1 First of all, try to relax and imagine that one is trying to stop the passing of flatus. Then tighten up the anus for five seconds, and follow by a ten-second relaxation. Repeat these movements ten times in a row to make up one set.

4.1.2 During the exercise, maintain normal breathing; and do not contract the abdominal, buttock and thigh muscles.

4.1.3 Repeat these "tightening and relaxation exercises" for at least three sets a day. The effect will be better still if six sets can be performed daily. When getting used to the exercises, the time of the tightening can be extended gradually. Remember to take a rest of at least one hour between sets of exercises.

4.1.4 The exercises should take effect after a few months. Continue exercising even when starting to notice the effects.

4.2 The fast contractions of the muscle fibres are the quick alternations between the tightening and relaxation of the pelvic floor muscles. Repeat these movements ten times in a row to make up one set. A minimum of three sets is required daily.

4.2.1 When getting used to the above pelvic floor exercises, they can be performed freely at any time and place or during daily activities such as:

- Brushing the teeth;
- Taking a bath;
- After toilet;
- Watching TV;
- Travelling in a car;
- Making telephone calls; and
- Lying in bed, etc.

4.2.2 The pelvic floor exercises can also be performed to prevent urine leakage under the below circumstances:

- Coughing;
- Sneezing;
- Lifting; and
- Pushing heavy objects

The pelvic floor exercises take time and perseverance to achieve and maintain good effects. If performed according to the above recommendations, the exercises will take effect in about six weeks. The more persevering with the practice, the more desirable will be the effects.

Bladder Training

1. What is bladder training?

Bladder training is used for training the stretching tone of the bladder muscles, so as to regain the normal bladder capacity. The condition of urinary incontinence and frequency can therefore be improved.

2. What is a normal bladder?

Generally, the bladder volume of an adult is around 300-500 ml. Urine voiding of around 4-6 times during daytime and once to twice at night is considered as normal. The flow of the voiding should be smooth and pain free, or without difficulties. Each voiding volume should be around 300ml or more. The volume of course, also depends on the amount of drinking. The bladder capacity of an elderly person is lesser than an adult. Therefore, they go to the toilet more frequently and their voiding volume is relatively less. It is considered as normal even if their voiding is 8 times a day.

3. How is bladder training performed?

Before bladder training, you would need a bladder chart or bladder diary to understand your voiding habit. For example, your bladder capacity, your day time and night time voiding frequencies, etc. A measuring jug is needed to measure the urine volume of each voiding. The incidental urine leaking is also required to be recorded.

3.1 The procedure of bladder training

3.1.1 Concentrated urine can irritate the bladder and cause urinary frequency. Except for those who have medical indications, an adult should drink 1.5 to 2 litres (around 6-8 cups) every day. The fluid should be evenly drunk throughout the day and avoid drinking a large volume within a short period. Refrain from alcoholic drinks and beverages which contain caffeine.

3.1.2 Avoid drinking two hours before sleeping.

3.1.3 Avoid a "just in case" habit of going to the toilet. However, the bladder should be emptied before going to sleep.

3.1.4 Try to hold the bladder when there is a mild voiding sensation. This can be done by diverting one's concentration through TV watching, phone call making or games playing until the voiding sensation disappears. Initially, difficulties in holding may be encountered and one can only hold for 2-3 minutes. If this habit of holding is persistently sustained, the duration can be prolonged.

3.1.5 Try to maintain a 2-3 hourly interval between toileting.

3.1.6 Record the daily voiding patterns in the bladder diary.

4. What attention is to be paid during bladder training?

Attention should be paid to the:

4.1 Development of good drinking and eating habits. Prevent constipation through drinking more water and taking high fibrous food such as vegetables and fruits. Keep a regular bowel habit.

4.2 Perform bladder training together with pelvic floor exercises.

4.3 Bladder training needs time and sustainability. Do not get frustrated during the training process.

4.4 Follow up regularly with your doctor.

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Care for the Advanced Diseases Consortium

The Federation is pleased to announce the establishment of the 'Care for the Advanced Disease Consortium', with the aim of fostering the development of palliative and end-of-life services for advanced diseases in Hong Kong. In the first meeting held on 2nd March, the Consortium has established the following stance: "To facilitate the availability of choices in aging and dying in place in Hong Kong, and to advise our government policy makers and stakeholders on improvements in palliative and end-of-life care for advanced diseases and death." It was a fruitful meeting as we agreed upon several initial actions, which include offering advice to the HKSAR government, coordinating with fellow medical professionals in training, and facilitating discussion with the healthcare insurance industry for better coverage of advanced diseases.

We would like to thank our Advisors Dr. LEONG Che-hung, Prof. Alfred CHAN, Dr. Mario CHAK; our Convener Dr. Raymond LO; our deputy Honorary Secretary Dr. CK Ng; and our members Dr. LAM Ching-choi, Dr. CHOI Kin, Dr. TSE Chun-yan, Dr. Edward M.F. LEUNG, Dr. YUNG Cho-yiu, Dr. Rico LIU, Dr. Theresa LAI Tsz-kwan, Mr. CHUA Hoi-wai , Prof. Cecilia CHAN Lai-wan, Mr. Raymond WONG, Ms. Amy CHAN and Mr. Samuel CHAN for their participation and valuable advice to the Consortium.

Spring Dinner 2017

The Federation celebrated the 2017 Chinese New Year with a Spring Dinner on 21st February. It was a festive occasion attended by our President, Officers, Executive Committee Members, Foundation Directors and the Secretariat colleagues. All of us at the Federation would like to wish our readers a prosperous Year of the Rooster!

Certificate Course for Doctors, Nurses, Paramedics and Allied Health Workers • Course No. C298 • CME/CNE Course

Certificate Course on

Difficult Communications in Healthcare

Jointly organised by

The Federation of Medical Societies of Hong Kong

Hong Kong Society for Healthcare Mediation

Date	Topics	Speakers
5 May	Patient Complaints	Dr Ludwig TSOI 蔡振興醫生 Senior Medical Officer
12 May	Interprofessional Communications	Dr Danny LEE 李偉雄醫生 Specialist Surgeon, Private Practice
19 May	ADR for Disputes Arising from Injury on Duty	Dr James CHIU 趙承平醫生 Assessor & Trainer, Mediation Courses
26 May	Workplace Conflicts	Dr Abraham WAI 衛家聰醫生 Clinical Assistant Professor, HKU
2 Jun	Breaking Bad News (To Staff & To Relatives)	Dr Kah-lin CHOO 俞佳琳醫生 Consultant
9 Jun	Open Disclosure	Dr Siu-fai LUI 雷兆輝醫生 Professional Consultant, CUHK

Dates : 5, 12, 19, 26 May, 2017 and 2, 9 June, 2017 (Every Friday)
Time : 7:00 pm – 8:30 pm
Venue : Lecture Hall, 4/F., Duke of Windsor Social Service Building, 15 Hennessy Road, Wanchai, Hong Kong
Course Fee : HK$750 (6 sessions)
Enquiry : The Secretariat of The Federation of Medical Societies of Hong Kong
Tel: 2527 8898 Fax: 2865 0345 Email: info@fmshk.org

CERTIFICATE COURSE FOR Health Care Professionals • Course No. C297 • CME/CNE Course

Certificate Course on

Best Practices in Quality of Life Evaluation and Assessments

Jointly organised by

The Federation of Medical Societies of Hong Kong

ACQO 世界華人生活質素學會
World Association for Chinese Quality of Life

Date	Topics	Speakers
5 Jul	Principles and Concepts of Quality of Life (QoL)	Dr Wendy Wong Assistant Professor, Hong Kong Institute of Integrative Medicine, School of Chinese Medicine The Chinese University of Hong Kong
12 Jul	Linguistic Validation and Basic Psychometric Evaluation of QoL Measures	Dr Daniel Fong Associate Professor, School of Nursing The University of Hong Kong
19 Jul	Further Psychometric Evaluation of QoL measures	Dr Daniel Fong Associate Professor, School of Nursing The University of Hong Kong
26 Jul	Interpreting QoL in Practice	Dr Daniel Fong Associate Professor, School of Nursing The University of Hong Kong
2 Aug	Using QoL in Chinese Medicine	Dr Zhao Li Chief of Chinese Medicine Service The Hong Kong Tuberculosis Association Chinese Medicine Clinic cum Training Centre The University of Hong Kong
9 Aug	Using QoL in Health Economic Evaluation	Dr Carlos Wong Research Assistant Professor, Department of Family Medicine and Primary Care The University of Hong Kong

Dates : 5, 12, 19, 26 July 2017 and 2, 9 August, 2017 (Every Wednesday)
Time : 7:00 pm – 8:30 pm
Venue : Lecture Hall, 4/F., Duke of Windsor Social Service Building, 15 Hennessy Road, Wanchai, Hong Kong
Course Fee : HK$750 (6 sessions)
Enquiry : The Secretariat of The Federation of Medical Societies of Hong Kong
Tel: 2527 8898 Fax: 2865 0345 Email: info@fmshk.org

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	★ HKMA Tai Po Community Network - Topic 1: The Application and Advantages of Protein Chip in Allergen Detection; Topic 2: Food Avoidance in Childhood Eczema ★ HKMA Council Meeting 2	3	4	★ Joint Surgical Symposium-Laparoscopic Colorectal Surgery 5	6
★ HKMA Snooker Tournament 2017 ★ HKMA Bridge Tournament 2017 (Professional Pairs) 7	8	★ HKMA Yau Tsim Mong Community Network - Management of Liver Metastasis ★ HKMA Tai Po Community Network - How to Help Children Eat Well -Transition to Eating Family Meal 9	★ Hong Kong Neurosurgical Society Monthly Academic Meeting – Low Pressure Hydrocephalus ★ HKMA Central, Western & Southern Community Network - Certificate Course on Geriatrics (Session 1) - Advances in the Early Diagnosis and Treatment of Alzheimer's Disease 10	★ HKMA Hong Kong East Community Network - Certificate Course on Diabetes Mellitus (Session 2) - Practical Aspects in Starting Insulin for T2DM ★ HKMA Kowloon East Community Network - DM and Renal Failure ★ HKMA New Territories West Community Network - An Update on Management of Allergic Rhinitis 11	12	★ Refresher Course for Health Care Providers 2016/2017 13
14	15	16	★ HKMA Shatin Doctors Network - Clinical Update: Audiology & Speech Therapy for Older Adults - Topic 1: Audiology Service for Older Adults; Topic 2: Speech and Swallowing Therapy for Older Adults 17	★ Certificate Course for GPs 2017 - Minor Surgery in Community Practice 18	★ HKMA Kowloon City Community Network - DM and Obesity 19	20
★ HKMA Squash Tournament 2017 21	22	★ HKMA-KLN West Community Network - Recent Advances in Treatment of Knee Pain 23	★ HKMA Shatin Doctors Network - Skin Barrier Function - Atopic Dermatitis and Fungal Infection 24	★ HKMA Kowloon East Community Network - Current Management Strategies in GERD ★ HKMA Hong Kong East Community Network - Certificate Course on Diabetes Mellitus (Session 3) - Prevention of Macrovascular Complication of DM ★ HKMA New Territories West Community Network - Updates in Colorectal Cancer Screening in Hong Kong 25	★ HKMA Yau Tsim Mong Community Network - Medical Nutrition Therapy of Early Stages Alzheimer's Disease 26	27
28	29	30	31			

Date / Time	Function	Enquiry / Remarks
2 TUE 1:00 PM	**HKMA Tai Po Community Network - Topic 1: The Application and Advantages of Protein Chip in Allergen Detection; Topic 2: Food Avoidance in Childhood Eczema** Organiser: HKMA Tai Po Community Network; Chairman: Dr. CHOW Chun Kwan, John; Speaker: Mr. CHEN Kang Hsin; Prof. HON Kam Lun, Ellis; Venue: Chiuchow Garden Restaurant (潮江春), Shop 001-003, 1/F, Uptown Plaza, No.9 Nam Wan Road, Tai Po, N.T.	Mr. Freeman WONG Tel: 5282 1316 1 CME Point
9:00 PM	**HKMA Council Meeting** Organiser: The Hong Kong Medical Association; Chairman: Dr. CHOI Kin; Venue: HKMA Wanchai Premises, 5/F, Duke of Windsor Social Service Building, 15 Hennessy Road, Hong Kong	Ms. Christine WONG Tel: 2527 8285
5 FRI 8:00 AM	**Joint Surgical Symposium-Laparoscopic Colorectal Surgery** Organiser: Department of Surgery, The University of Hong Kong & Hong Kong Sanitorium & Hospital; Chairman: Dr Oswens LO; Speakers: Dr. Michael LI; Dr. FOO Chi-Chung; Venue: Hong Kong Sanitorium & Hospital	Department of Surgery, Hong Kong Sanitorium & Hospital Tel: 2835 8698 Fax: 2892 7511 1 CME Point (Active)
7 SUN 1:00 PM	**HKMA Bridge Tournament 2017 (Professional Pairs)** Organiser: The Hong Kong Medical Association; Chairman: Dr. Kingsley CHAN & Dr. IP Wing Yuk; Venue: Main Hall, 3/F., Mariners' Club, Middle Road, Tsimshatsui, Kowloon	Miss Ada SIU/ Miss Denise KWOK Tel: 2527 8285
2:00 PM	**HKMA Snooker Tournament 2017** Organiser: The Hong Kong Medical Association; Chairman: Dr. Kingsley CHAN & Dr. IP Wing Yuk; Venue: Youth Billiard Club, Houston Centre, 63 Mody Road, Tsim Sha Tsui, Kowloon	Miss Ada SIU/ Miss Denise KWOK Tel: 2527 8285
9 TUE 1:00 PM	**HKMA Yau Tsim Mong Community Network - Management of Liver Metastasis** Organiser: HKMA Yau Tsim Mong Community Network; Chairman: Dr. CHAN Wai Keung, Ricky; Speaker: Dr. TSE Yiu Cheong; Venue: Crystal Ballroom, 2/F, The Cityview Hong Kong, 23 Waterloo Road, Kowloon	Ms. Candice TONG Tel: 2527 8285
1:45 PM	**HKMA Tai Po Community Network - How to Help Children Eat Well -Transition to Eating Family Meal** Organiser: HKMA Tai Po Community Network; Chairman: Dr. CHOW Chun Kwan, John; Speaker: Dr. LUK Wai Yin; Venue: Chiuchow Garden Restaurant (潮江春), Shop 001-003, 1/F, Uptown Plaza, No.9 Nam Wan Road, Tai Po, N.T.	Ms. Candice TONG Tel: 2527 8285 1 CME Point
10 WED 7:30 AM	**Hong Kong Neurosurgical Society Monthly Academic Meeting – Low Pressure Hydrocephalus** Organiser: Hong Kong Neurosurgical Society; Chairman: Dr. PO Yin Chung; Speaker: Dr. HUNG Sze Lok Remy; Venue: Seminar Room, G/F, Block A, Queen Elizabeth Hospital	Dr LEE Wing Yan, Michael Tel: 2595 6456 Fax: 2965 4061 1.5 CME Point (College of Surgeons of Hong Kong)
1:00 PM	**HKMA Central, Western & Southern Community Network - Certificate Course on Geriatrics (Session 1) - Advances in the Early Diagnosis and Treatment of Alzheimer's Disease** Organiser: HKMA Central, Western & Southern Community Network; Chairman: Dr. YIK Ping Yin; Speaker: Dr. CHU Leung Wing; Venue: Shanghai Garden Restaurant (紫玉蘭), Shop 203, 2/F, Hutchison House, 10 Harcourt Road, Admiralty	Mr. Ziv WONG Tel: 2527 8285 1 CME Point
11 THU 1:00 PM	**HKMA Hong Kong East Community Network - Certificate Course on Diabetes Mellitus (Session 2) - Practical Aspects in Starting Insulin for T2DM** Organiser: HKMA Hong Kong East Community Network; Chairman: Dr. LEE Huen; Speaker: Dr. Norman CHAN; Venue: HKMA Wanchai Premises, 5/F, Duke of Windsor Social Service Building, 15 Hennessy Road, Hong Kong	Ms. Candice TONG Tel: 2527 8285 1 CME Point
1:00 PM	**HKMA Kowloon East Community Network - DM and Renal Failure** Organiser: HKMA Kowloon East Community Network; Chairman: Dr. AU Ka Kui, Gary; Speaker: Dr. WU, Enoch; Venue: Lei Garden Restaurant, Shop No. L5-8, APM, No. 418 Kwun Tong Road, Kwun Tong, Kowloon	Mr. Ziv WONG Tel: 2527 8285 1 CME Point
1:00 PM	**HKMA New Territories West Community Network - An Update on Management of Allergic Rhinitis** Organiser: HKMA New Territories West Community Network; Chairman: Dr. LEE Shin Cheung; Speaker: Dr. IP Ka Lun; Venue: Pak Loh Chiu Chow Restaurant (百樂潮州酒樓), Shop A316, 3/F, Yoho Mall II, 8 Long Yat Road, Yuen Long	Mr. Ziv WONG Tel: 2527 8285 1 CME Point
13 SAT 2:15 PM	**Refresher Course for Health Care Providers 2016/2017** Organiser: Hong Kong Medical Association; HK College of Family Physicians; HA-Our Lady of Maryknoll Hospital; Speaker: Dr. TING Zhao Wei; Venue: Training Room II, 1/F, OPD Block, Our Lady of Maryknoll Hospital, 118 Shatin Pass Road, Wong Tai Sin, Kowloon	Ms. Clara TSANG Tel: 2354 2440 2 CME Points
17 WED 1:00 PM	**HKMA Shatin Doctors Network - Clinical Update: Audiology & Speech Therapy for Older Adults - Topic 1: Audiology Service for Older Adults; Topic 2: Speech and Swallowing Therapy for Older Adults** Organiser: HKMA Shatin Doctors Network; Chairman: Dr. MAK Wing Kin; Speaker: Ms. Celine LAI; Ms. Angela LEE; Venue: Jasmine Room, Royal Park Hotel, 8 Pak Hok Ting Street, Shatin, N.T.	Ms. Stella FOK Tel: 2193 5905 1 CME Point
18 THU 1:00 PM	**Certificate Course for GPs 2017 - Minor Surgery in Community Practice** Organiser: HA-United Christian Hospital, HK College of Family Physicians, HKMA-KLN East Community Network; Chairman: Dr. Gary AU Ka Kui; Speaker: Dr. Calvin TSUI Kwan Pok; Venue: Conference Room, G/F, Block K, United Christian Hospital	Ms. Polly TAI Tel: 3513 3430 1 CME Point
19 FRI 1:00 PM	**HKMA Kowloon City Community Network - DM and Obesity** Organiser: HKMA Kowloon City Community Network; Chairman: Dr. CHIN Chu Wah; Speaker: Dr. CHAN Chun Chung, Ray; Venue: Sportful Garden Restaurant (陶源酒家), 2/F, Site 6, Whampoa Garden, Wonderful Worlds of Whampoa, 8 Shung King Street, Hung Hom, Kowloon	Ms. Candice TONG Tel: 2527 8285 1 CME Point
21 SUN 2:30 PM	**HKMA Squash Tournament 2017** Organiser: The Hong Kong Medical Association; Chairman: Dr. Kingsley CHAN & Dr. IP Wing Yuk; Venue: Kowloon Cricket Club, 10 Cox's Road, Jordan, Kowloon	Miss Ada SIU/ Miss Denise KWOK Tel: 2527 8285
23 TUE 1:00 PM	**HKMA-KLN West Community Network - Recent Advances in Treatment of Knee Pain** Organiser: HKMA-KLN West Community Network; Chairman: Dr. CHAN Ching Pong; Speaker: Dr. YEN Chi Hung; Venue: Crystal Room IV-V, 3/F, Panda Hotel, 3 Tsuen Wah Street, Tsuen Wan, NT	Mr. Ziv WONG Tel: 2527 8285 1 CME Point
24 WED 1:00 PM	**HKMA Shatin Doctors Network - Skin Barrier Function - Atopic Dermatitis and Fungal Infection** Organiser: HKMA Shatin Doctors Network; Chairman: Dr. MAK Wing Kin; Speaker: Dr. HO Ka Keung; Venue: Jasmine Room, Royal Park Hotel, 8 Pak Hok Ting Street, Shatin, N.T.	Ms. Candice TONG Tel: 2527 8285 1 CME Point

Date / Time	Function	Enquiry / Remarks
25 *THU* 1:00 PM	**HKMA Kowloon East Community Network - Current Management Strategies in GERD** Organiser: HKMA Kowloon East Community Network; Chairman: Dr. LEUNG Wing Hong; Speaker: Dr. LEE Ming Kai, Derek; Venue: V Cuisine, 6/F., Holiday Inn Express Hong Kong Kowloon East, 3 Tong Tak Street, Tseung Kwan O	Mr. Ziv WONG Tel: 2527 8285 1 CME Point
1:00 PM	**HKMA Hong Kong East Community Network - Certificate Course on Diabetes Mellitus (Session 3) - Prevention of Macrovascular Complication of DM** Organiser: HKMA Hong Kong East Community Network; Chairman: Dr. LEUNG Kwan Kui, Terence; Speaker: Dr. MA Pui Shan; Venue: HKMA Wanchai Premises, 5/F, Duke of Windsor Social Service Building, 15 Hennessy Road, Hong Kong	Ms. Candice TONG Tel: 2527 8285 1 CME Point
1:00 PM	**HKMA New Territories West Community Network - Updates in Colorectal Cancer Screening in Hong Kong** Organiser: HKMA New Territories West Community Network; Chairman: Dr. CHEUNG Kwok Wai, Alvin; Speaker: Dr. TSE Tak Yin, Cyrus; Venue: Atrium Function Rooms, Lobby Floor, Hong Kong Gold Coast Hotel, 1 Castle Peak Road, Gold Coast, Hong Kong	Mr. Ziv WONG Tel: 2527 8285 1 CME Point
26 *FRI* 1:00 PM	**HKMA Yau Tsim Mong Community Network - Medical Nutrition Therapy of Early Stages Alzheimer's Disease** Organiser: HKMA Yau Tsim Mong Community Network; Chairman: Dr. LEUNG Wai Fung, Anders; Speaker: Dr. CHUANG Lai; Venue: Diamond Room, 5/F, The Cityview Hong Kong, 23 Waterloo Road, Kowloon	Ms. Candice TONG Tel: 2527 8285 1 CME Point

Answers to Dermatological Quiz

Answer:

1. Photodermatitis is the diagnosis as evidenced by the classical distribution of the lesions over sun-exposed areas. The dermatitis was predilected over her face, V-area of the neck and extensor aspects of the forearms.

2. Drug history was important in this patient as the onset of the rash was close to the diagnosis of her epilepsy. She had been started with phenytoin for 3-4 weeks prior to the onset of the rash. Phenytoin-induced photosensitivity was the underlying cause of her skin lesions.
   Drug-induced photosensitivity is mainly due to ultraviolet-B & ultraviolet-A and part of the visible light. Common culprits include thiazide, amiodarone, phenothiazine, tricyclic antidepressants, tetracycline, sulphonamide, psoralen, tolbutamide, etc.

3. As there is no diagnostic laboratory test for drug reaction in routine clinical practice, the diagnosis is mainly based on the temporal relationship between the intake of the culprit drug and onset of rash, together with the knowledge of that drug. Other important underling causes therefore must be excluded, which include collagen-vascular diseases (especially systemic lupus erythematosus and dermatomyositis), porphyria, metabolic diseases and other idiopathic photodermatoses. The antinuclear factor, anti-dsDNA, serum muscle enzymes, urine for porphyrin were all negative or normal in this patient.

4. Phenytoin had been stopped and shifted to another alternative. Strict sun-protection was advised and a short course of oral prednisolone prescribed. Subsequently her skin lesions subsided completely within a few weeks.

Dr Lai-yin CHONG
MBBS(HK), FRCP(Lond, Edin, Glasg), FHKCP, FHKAM(Med)
Specialist in Dermatology & Venereology

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- Cheng 5-year outcomes:[2]
  - 92% cured
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References:

* In a 5-year prospective observational study, where 191 women were treated with GYNECARE TVT Obturator System
† In a 5-year analysis of 9,754 women treated with various brands of obturator slings

1. Serati M, Bauer R, Cornu JN et al. TVT-O for the treatment of pure urodynamic stress incontinence: efficacy, adverse effects, and prognostic factors at 5-year follow-up. *Eur Urol.* 2013 May;63(5):872-8. Epub 2012 Dec 20 **2.** Cheng D, Liu C. Tension-free vaginal tape-obturator in the treatment of stress urinary incontinence: a prospective study with five-year follow-up. *Eur J Obstet Gynecol Reprod Biol.* 2012 Apr;161(2):228-31. Epub 2012 Feb 13 **3.** Data on File, Ethicon Inc., Published Sling Data Analysis Mar 2013 **4.** Magee G, Roy S, Hinoul P, Moretz C, Kozarev R, Waters H, Whitmore K. A real-world comparative assessment of complications following various mid-urethral sling procedures for the treatment of stress urinary incontinence. *J Long Term Eff Med Implants.* 2012. 22(4): 329–340

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*OAB: Overactive Bladder + LUTS: Lower Urinary Tract Symptoms

Reference: **1.** Chapple C.R. et al. Neurourol Urodynam 2013 [doi 10.1002/nau22505] **2.** Chapple C.R. et al. Eur Urol Supp. 2005; 4:33-44 **3.** Guidelines on the Management of Non-Neurogenic Male LUTS. European Association of Urology. 2015. **4.** DIAGNOSIS AND TREATMENT OF OVERACTIVE BLADDER (Non-Neurogenic) IN ADULTS: AUA/SUFU GUIDELINE. American Urological Association. 2014.

HARNAL OCAS® Abridged Prescribing Information **I:** Lower urinary tract symptoms (LUTS) associated w/ benign prostatic hyperplasia (BPH). **D:** 0.4mg once daily. **A:** Can be taken with or without food. Swallow whole, do not chew/divide/crush. **C:** Hypersensitivity. **AR:** Common: Dizziness (1.3%), ejaculation disorder. **Full prescribing information is available upon request.**

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