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FOR HER, THERE'S NO SUCH THING AS A SMALL FALL

Patients with osteoporosis face the danger of its consequences. With Prolia®, the risk of fracture at the hip and other key sites was reduced significantly vs. placebo at 3 years (P<0.05).[1] And because the 6-monthly subcutaneous injection[2] is well tolerated,[1] you can help protect them.

For the treatment of osteoporosis in postmenopausal women and in men at increased risk of fractures. Prolia® significantly reduces the risk of vertebral, non-vertebral and hip fractures.[2]

Prolia® (Denosumab) Abbreviated Prescribing Information

Prolia® (Denosumab) Solution for Injection in Pre-filled Syringe 60 mg/mL. **INDICATIONS** Prolia is indicated for: i) treatment of postmenopausal women with osteoporosis at high risk for fracture, defined as a history of osteoporotic fracture, or multiple risk factors for fracture; or patients who have failed or are intolerant to other available osteoporosis therapy; ii) treatment to increase bone mass in men with osteoporosis at high risk for fracture, defined as a history of osteoporotic fracture, or multiple risk factors for fracture; or patients who have failed or are intolerant to other available osteoporosis therapy; iii) treatment to increase bone mass in men at high risk for fracture receiving androgen deprivation therapy for nonmetastatic prostate cancer, and; iv) treatment to increase bone mass in women at high risk for fracture receiving adjuvant aromatase inhibitor therapy for breast cancer. **DOSAGE AND ADMINISTRATION** The recommended dose of Prolia is 60 mg administered as a single subcutaneous injection once every 6 months. Administer Prolia via subcutaneous injection in the upper arm, the upper thigh, or the abdomen. All patients should receive calcium 1000 mg daily and at least 400 IU vitamin D daily. **CONTRAINDICATIONS** Hypocalcemia and pregnancy, as well as hypersensitivity to any component of the product. **SPECIAL WARNINGS AND PRECAUTIONS FOR USE** *Hypersensitivity*: Clinically significant hypersensitivity including anaphylaxis has been reported with Prolia. Symptoms have included hypotension, dyspnea, throat tightness, facial and upper airway edema, pruritis, and urticaria. *Hypocalcemia and Mineral Metabolism*: Hypocalcemia may be exacerbated by the use of Prolia. Pre-existing hypocalcemia must be corrected prior to initiating therapy with Prolia. Hypocalcemia following Prolia administration is a significant risk in patients with severe renal impairment (creatinine clearance < 30 mL/min) or receiving dialysis. Adequately supplement all patients with calcium and vitamin D. *Serious Infections*: Serious infections leading to hospitalization were reported in clinical trial. Advise patients to seek prompt medical attention if they develop signs or symptoms of severe infection, including cellulitis. *Dermatologic Adverse Reactions*: Dermatitis, eczema, and rashes. Most of these events were not specific to the injection site. Consider discontinuing Prolia if severe symptoms develop. *Osteonecrosis of the Jaw (ONJ)*: ONJ, which can occur spontaneously, is generally associated with tooth extraction and/or local infection with delayed healing. A dental examination with appropriate preventive dentistry is recommended prior to treatment with Prolia in patients with risk factors. Patients who are suspected of having or who develop ONJ while on Prolia should receive care by a dentist or an oral surgeon. *Atypical Subtrochanteric and Diaphyseal Femoral Fractures*: Atypical low-energy or low trauma fractures of the shaft have been reported in patients receiving Prolia. Patients should be advised to report new or unusual thigh, hip, or groin pain. *Suppression of Bone Turnover*: In clinical trials treatment with Prolia resulted in significant suppression of bone remodeling as evidenced by markers of bone turnover and bone histomorphometry. *Musculoskeletal Pain*: Severe and occasionally incapacitating bone, joint, and/or muscle pain. Consider discontinuing use if severe symptoms develop. **INTERACTIONS** In subjects with postmenopausal osteoporosis, Prolia (60 mg subcutaneous injection) did not affect the pharmacokinetics of midazolam, which is metabolized by cytochrome P450 3A4 (CYP3A4), indicating that it should not affect the pharmacokinetics of drugs metabolized by this enzyme in this population. **PREGNANCY AND LACTATION** *Pregnancy*: Category X. *Breast-feeding*: It is not known whether Prolia is excreted into human milk. **PEDIATRIC, GERIATRIC AND RENAL IMPAIRMENT** *Pediatric*: Prolia is not recommended in pediatric patients. *Geriatric*: No overall differences in safety or efficacy were observed in clinical studies between elderly patients and younger patients and other reported clinical experience has not identified differences in responses between the elderly and younger patients, but greater sensitivity of some older individuals cannot be ruled out. *Renal Impairment*: No dose adjustment is necessary in patients with renal impairment. **UNDESIRABLE EFFECTS** The most common adverse reactions reported with Prolia in patients with postmenopausal osteoporosis are back pain, pain in extremity, musculoskeletal pain, hypercholesterolemia, and cystitis. The most common adverse reactions reported with Prolia in men with osteoporosis are back pain, arthralgia, and nasopharyngitis. The most common (per patient incidence ≥ 10%) adverse reactions reported with Prolia in patients with bone loss receiving androgen deprivation therapy for prostate cancer or adjuvant aromatase inhibitor therapy for breast cancer are arthralgia and back pain. Pain in extremity and musculoskeletal pain have also been reported in clinical trials. The most common adverse reactions leading to discontinuation of Prolia in patients with postmenopausal osteoporosis are back pain and constipation. **OVERDOSE** There is no experience with overdosage with Prolia. Abbreviated Prescribing Information Version: US02/2015CDS13/IPI04

**Post-hoc* analysis. ARR, Absolute risk reduction.

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1. Boonen S *et al. J Clin Endocrinol Metab* 2011;**96**: 1727–1736.
2. Prolia® (denosumab), Summary of Product Characteristics, 2014.
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The Cover Shot

This photograph was taken at a medical museum (Medical Museion) in Copenhagen, Denmark. This artwork *Femme Vitale* was made of 27,774 tablets and capsules, comprising of 11 different medicines, representing the medicine used over 10 years for two women with metabolic syndrome. As a gynaecologist, this exhibit reminds me of the association between metabolic syndrome and polycystic ovarian syndrome, which is a common condition affecting women of reproductive age.[1]

Reference

1. Cheung CSY. Menstrual disorders in adolescents. The Hong Kong Medical Diary. 2016;21:22-25.

Dr Vincent YT CHEUNG

MBBS, FRCOG, FRCSC
Consultant,
Department of Obstetrics and Gynaecology,
Queen Mary Hospital,
The University of Hong Kong, Hong Kong

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Editorial

Dr TN Danny LEUNG

MBChB, MD (CUHK), M.Med (O&G) (Singapore), FRCOG (UK), DCH (Ireland), FHKCOG, FHKAM (O&G)

President,
The Obstetrical & Gynaecological Society of Hong Kong

Editor

Dr TN Danny LEUNG

One of the aims of the FMSHK is to promote the advancement of knowledge and continuing education of the medical and dental professionals. The Hong Kong Medical Diary, an official monthly publication of the FMSHK, is one of the most important channels to achieve this. It is the privilege of the Obstetrical and Gynaecological Society of Hong Kong to contribute to this issue.

When planning the topics, I had a long discussion with Dr Vincent Cheung, Vice-president of our Society. We have decided to concentrate on gynaecology this time as there has already been an issue on 'Prenatal Diagnosis' in October 2015.

Genital lichen sclerosis is a dermatological disorder which might present to gynaecologists, dermatologists and family physicians. It is also a condition we sometimes find it difficult to manage and there is concern of progression to malignancy. Dr Jennifer Bradford, a conjoint Senior Lecturer of the Western Sydney University, Australia and an expert in vulvovaginal disease, gave a series of excellent lectures in the Annual Scientific Meeting (ASM) of our Society in May this year. We are very grateful that she has accepted our invitation to contribute an article on the management of genital lichen sclerosis in women and girls.

The other aspect we believe would be of interest to the readers is the prevention of gynaecological malignancies. In this, we have focused on two, the cervical and ovarian malignancies. For the cervical cancer, a link between high-risk human papilloma virus (HPV) and the disease has been well established. The subsequent availability of bivalent and quadrivalent HPV vaccination has been shown to significantly reduce the incidence of cervical intraepithelial neoplasia (CIN) and cervical cancer. Several countries have already included the HPV vaccination into the national routine vaccination programme for teenager girls. Further research and technical development has seen the availability of the nonavalent HPV vaccine, which provides an even better coverage and hence protection. The new vaccine is available in Hong Kong since early this year. Dr Ka-yu Tse, Consultant and Gynaecological Oncologist from the Queen Mary Hospital has contributed a most updated review on the scientific basis of the HPV vaccination for prevention of cervical cancer and its limitation.

For ovarian cancer, it is usually at an advanced stage when it is diagnosed and hence the prognosis is grave. Early detection of ovarian cancer through screening tests has been the hot topic for research for the past decade. The article by Dr Mandy Chu, Associate Consultant and Gynaecological Oncologist from the Queen Mary Hospital, is an update of the pros and limitation of each of the screening tests used. The information will be useful for both gynaecologists and physicians involved in 'body checks'.

Paediatric adolescent gynaecology (PAG) is increasingly recognised as a disciplinary in gynaecology. We had a whole session on PAG in our ASM in May, of which the topic on 'Menstrual Disorders in Adolescents'

should be of relevance to the readers. We have therefore invited the speaker, Dr Charleen Cheung, Honorary Clinical Assistant Professor, University of Hong Kong to write a review on this topic. As the topic is of more general interest, we have chosen this article for the CME exercise for the current issue.

Unplanned pregnancies happen and the demand for a termination of pregnancy will continue. Legal abortion is allowed in Hong Kong for up to 24 weeks gestation. Traditionally, surgical termination of pregnancy is the preferred option before 13-14 weeks of gestation whereas a medical termination is arranged at later gestation. Prior to the availability of mifepristone (RU 486), prostaglandin and its analogues are used for medical termination. Prostaglandin and its analogues, used alone, take time to achieve the abortion effect and there is a relatively lower chance of complete abortion compared with surgical evacuation especially in the first trimester. However, the use of mifepristone followed by prostaglandins given at intervals between 24-48 hours later, has been shown to achieve a complete abortion rate of > 95%. This has made the medical route of termination of pregnancy a very viable alternative to surgical abortion even before 13-14 weeks. Mifepristone is now registered in Hong Kong for medical abortion. It is important for related healthcare providers to be familiarised with the scientific basis and the common protocols in its use. In this issue, Dr Joyce Chai from the Obstetrics and Gynaecology Centre, Hong Kong Sanatorium & Hospital has provided an update on the use of mifepristone in medical terminations in Hong Kong.

For the life style section, we have invited Drs Lowina Tse and Mona Lam to share with us their own experience in a community cervical screening for marginalised women in different regions in Hong Kong since 2008. This project involves volunteers from the Hong Kong Women Doctors Association, social workers and volunteers from other non-governmental organisations (NGO). Cervical smear screening is a procedure we routinely perform in clinics for women. However, when organised in other settings, there are hassles and obstacles we would not have visualised. Their article is interesting to read. The readers should also recognise how much effort the authors and their colleagues have put in to ensure that the targeted women can benefit from it.

Last but not least, I need to thank Dr Vincent Cheung in his help in every aspect, from providing me with good suggestions of topics (and authors, of course) to supplying me with the cover photo. I sincerely hope that the readers can gain something from this issue. Happy reading!

Genital Lichen Sclerosus in Women and Girls

Dr Jennifer BRADFORD

MBBS, FRANZCOG

The Centre for Vulvovaginal Health
Sydney, Australia.

Dr Jennifer BRADFORD

INTRODUCTION

Lichen sclerosus (LS) is an uncommon, chronic inflammatory skin disease with a predilection for genital skin. It causes progressive scarring and has a lifetime risk of squamous cell carcinoma (SCC) of about 5%. Genital LS was first recognised in 1887, and the medical community has had a century to appreciate just how devastating this disease can be when not adequately controlled. Fortunately, the feared complications of LS can be greatly reduced by modern management. The diagnosis is usually straightforward, and most cases can be safely and adequately controlled with topical corticosteroid preparations.

EPIDEMIOLOGY

The published incidence of LS in adult women is between 1 in 300 and 1 in 1000. These estimates are almost certainly too low, because many symptomatic cases go unrecognised, and because of a smaller number of asymptomatic cases. There are two incidence peaks: in post-menopausal women, and in pre-menarchal girls. In adults, approximately two thirds of cases will be post-menopausal. Paediatric cases account for about 5-15% of all LS presentations.

AETIOLOGY

The aetiology of LS is unknown. There are some associations with auto-immune diseases, particularly thyroid disease and vitiligo. The predilection for low-oestrogenic states gives rise to the theory that LS may be related to low serum oestradiol levels. However hormone replacement therapy does not have a protective effect, and is certainly not therapeutic. One sees from time multiple family members with LS, but again, no definite genetic pattern has been demonstrated.

NATURAL HISTORY

LS is thought to have a continuous, life-long course. It progressively causes cutaneous scarring, labial fusion and neoplasia, irrespective of symptoms. The pathogenesis of SCC in this disease is thought to be the same as for scar cancers. Spontaneous remission of LS can occur but is rare. Most cases of so-called "remission" are in fact asymptomatic progression. LS behaves in pregnancy like an auto-immune disease: it partly remits during gestation, and then flares post-partum.

PRESENTATION

The vast majority of women with LS present with vulval itching, but a smaller proportion present with only pain or dyspareunia. Pain with LS is most often caused by excoriations or fissuring. It is important to remember that LS frequently involves the peri-anal skin, and the patient may then present with peri-anal, rather than vulval, symptoms.

A very small number have asymptomatic LS, which is usually discovered during a routine Pap test examination. It behoves all clinicians who perform well woman checks, to carefully examine the genital skin before passing a speculum.

Clinical Presentation in Children

This is usually the same as for adults. However children may present with pain on micturition or defaecation. They may also present with constipation, due to defaecation pain, and may therefore be initially referred to gastroenterologists. Unfortunately, genital LS in young girls may trigger allegations of child abuse, especially if the lesions are purpuric.

Examination Findings

The typical appearance is of an ill-defined white sclerotic plaque with an atrophic wrinkled surface and areas of purpura. However, there are many variations. These include:

- Multiple white papules or macules
- Hyperkeratotic lesions
- Plaques limited to small areas such as the tips of the labia minora or the clitoris or clitoral hood
- Oedema on a background of pallor
- Telangiectasia, purpura, haemorrhagic blistering on a background of pallor
- Fissures, traumatic ulcers
- Erosions
- LS associated with vulval psoriasis, which appears erythematous
- Brown hyperpigmentation similar to melanosis vulvae which can supervene.

The distribution of LS is also very variable. The classic textbook description is of a "figure of eight" rash encircling the vulva, perineum and peri-anal skin. However it can affect only the peri-anal region, clitoris, or internal surface of the labia majora, labia minora, and the vaginal introitus. Sometimes multiple small white

plaques are seen, scattered over the genital skin. LS does not involve the vagina proper (that is, within the hymen).

Recognising LS, particularly in the late stage, may be more difficult. It is helpful to remember that the vulval shape will be abnormal. If the labia minora are missing, or if the clitoris is buried under scar tissue, these findings alone are very suggestive of this condition.

LS obeys what is called the Koebner phenomenon, which means it localises into areas of friction and trauma. This possibly explains why it is usually most recalcitrant on the perineum and the inner surfaces of the labia minora. LS can 'run' in perineal flexures, and also along obstetric and gynaecological surgical scars.

It is very typical for the labia minora to fuse, most commonly at the posterior introitus. The fusion line is brittle and easily tears during intercourse. Perineal fissuring and tearing is also common. Eventually the vaginal opening (introitus) may become significantly stenosed, with pooling of urine within the vagina, simulating urinary incontinence.

If left untreated, the labia minora eventually become reabsorbed and the clitoris becomes entrapped and buried, revealing an overall atrophic, shiny, white vulva missing normal anatomy. With end stage disease, epithelial change may be hard to find, and all that is left is gross distortion of the vulva.

INVESTIGATION

Although vulval LS generally has a characteristic clinical appearance, a skin biopsy from the affected site provides diagnostic confirmation and exclusion of alternate diagnoses, such as vulval intra-epithelial neoplasia (VIN), squamous cell carcinoma (SCC) or lichenified psoriasis. The clinico-pathological correlation in LS is very strong. A positive biopsy is also helpful in counselling the patient about the important long-term consequences and the need for follow-up, and it is recommended for all adult patients. It is also useful if the patient changes medical practitioners. Treated disease may appear normal and it is important that there is a clear, histopathological record of the diagnosis so that there is no confusion.

I use 2% lignocaine with adrenaline, delivered by an insulin syringe. This 30F needle greatly reduces the pain of the injection. A 3mm punch specimen is then taken from the worst area. This is small enough to not require a suture.

It should be noted that prior treatment with a topical corticosteroid may render the histological appearances non-specific. However, a biopsy from a white area is usually diagnostic.

In children, a clinical diagnosis is almost always sufficient because of the difficulties of a biopsy, and also because neoplastic transformation has never been reported to occur in children with LS.

The histology is distinctive and uniform across ages and genders. The epidermis is atrophic with hydropic degeneration of basal cells and the upper dermis shows homogenous pale areas, termed by histopathologists 'collagenisation', 'homogenisation' or 'hyalinisation'. There is also a lichenoid infiltrate of mainly mononuclear cells in the dermis.

It is worthwhile doing a serum TSH on all adult patients because of the known association with thyroid disease.

Differential Diagnosis

This includes other white vulval lesions:

- VIN
- SCC
- extra-mammary Paget's disease (usually red, but can look white)
- lichenified atopic dermatitis, especially psoriasis
- condyloma accuminatum (warts)
- non-pigmented seborrhoeic keratoses
- vitiligo

MANAGEMENT

LS in adults is a lifelong disease that is very unlikely to remit. It is important to make sure patients understand that treatment will be for life. This news is very difficult for many patients to accept and it is important to reinforce this message at every visit. A comparison to essential hypertension, which most patients understand is not curable, is a useful analogy.

In the rare instances where apparent remission has occurred, patients need to be kept under long-term observation as LS can re-activate after years of dormancy.

There are two phases of treatment for LS:
1. Induction of remission
2. Maintenance treatment

Induction of Remission

The decision of which corticosteroid ointment to use is made based on the degree of hyperkeratosis (thickening) of the vulval skin. I recommend the use of the following steroid ointments daily until review at six weeks:

- Severely hyperkeratotic disease: Super-potent corticosteroid (eg clobetasol propionate 0.05%)
- Hyperkeratotic disease: Potent corticosteroid (eg betamethasone dipropionate 0.05%, mometasone furoate 0.1%)
- Mild disease with very little hyperkeratosis: moderate corticosteroid (eg triamcinolone acetonide 0.02%, methylprednisolone aceponate 0.1%, aclometasone dipropionate 0.05%)

The six-week review is to check for response to treatment, side effects, and for ongoing emotional support. When their symptoms improve, many patients assume they are cured. It is important to emphasise that treatment must now be maintained, to prevent scarring and cancer.

The initial topical corticosteroid is then continued daily until the skin texture and colour has returned to normal. This may take from three to six months. It should be

noted that some women develop residual hyper- or hypo-pigmentation at the site of the (now controlled) LS. I have found that compliance is best when patients incorporate treatment into their daily routines.

Maintenance Treatment

The endpoint for treatment is not merely symptom control: it is normalisation of the affected skin. This is assessed by the treating clinician, not the patient. Patients should be encouraged not to stop treatment once they are in remission, but to continue with the lowest weekly dose of corticosteroid possible to maintain complete objective normality. Patients who do not comply with treatment have a 50% risk of scarring and a 5% risk of development of malignancy. Each review is an opportunity to remind your patients of the importance and safety of maintenance treatment.

The main outcome measures of treatment are:

- Symptom control: no itch or soreness.
- Pain-free intercourse: in postmenopausal women this may also require topical oestrogen if symptomatic menopausal atrophy is also present.
- Prevention of further scarring, fusion and loss of clitoral substance. (Reduction in the size of the labia minora is not always prevented by treatment, but does not affect sexual performance).
- Prevention of malignancy.
- No side effects.

My recommended long-term follow-up regimen is:

- Patients are reviewed every six months until they have been in a stable remission for two years. They are then seen yearly, with the proviso that they have an examination by their general practitioner half way through that year and come back earlier if they have any concerns. Patients whose compliance is less than satisfactory should be seen by the treating specialist every six months.
- If hyperkeratosis recurs on treatment, a more potent corticosteroid is used until this settles.
- If there is evidence of corticosteroid excess, less is used. Corticosteroid excess usually evidences itself with vulval redness and burning. This reverses quickly once treatment is adjusted.

I have found this long-term method of managing LS to be successful, safe, inexpensive and outstandingly effective. In my compliant patients, none have to date developed a cancer and over 95% have had no further disease progression or scarring. Over 90% have complete, and sustained symptom control and of those who are sexually active, over 90% no longer experience dyspareunia.

Side Effects of Topical Corticosteroids

Side effects are remarkably few. I rarely see corticosteroid induced atrophy. I have encountered:

- Candidiasis: this is easily controlled with antifungal therapy.
- Erythema / steroid dermatitis: this responds rapidly to a reduction in corticosteroid strength.
- Stinging from topical therapy: this is usually caused by fissures and erosions, and settles as they heal. It is almost always possible to find a well-tolerated topical corticosteroid.

Some patients have thickened areas that do not respond to even clobetasol propionate application. These should always be biopsied to rule out malignancy. Such lesions may respond to intralesional corticosteroid if they are causing distress, and ablative laser treatment can also be effective for these lesions. The most important principle is to maintain observation. LS is pre-malignant, potentially unpredictable and liable to recur if patients become complacent about its management. Continued follow up of these patients has been seen by some to be a burden on health systems. I however would argue that the prevention of vulval cancer is a significant cost reduction for any health system.

Other Topical Therapies

Topical immunosuppressive agents, such as tacrolimus and pimecrolimus have been discussed as alternatives to corticosteroids, but the published short-term studies show that they are no more effective than corticosteroids. They are however more expensive, very likely to sting and burn, and their long-term safety is not established.

Those authors who recommend these agents state that they are less likely to cause atrophy than topical corticosteroids. However, this argument seems unnecessary as I rarely see atrophy in my patients treated with corticosteroids. Topical immunosuppressives have a theoretical risk of inducing malignancy, and it seems ill-advised to use them when corticosteroids are so safe and effective. There are case reports of SCC developing in LS patients treated with these agents.

Recently there has been some interest in intralesional platelet-rich plasma. This has been incorrectly termed "stem-cell treatment" by some practitioners. My own limited experience of this treatment is that it might help some patients, but in LS it is still experimental. The few publications on this technique are of short term case series only. It must be emphasised that this treatment is not a substitute for topical therapy. It is at best an adjunct.

Topical testosterone is of historical interest only. It was never effective, and should not be used to treat LS.

Similarly, topical oestrogen is of no value in the treatment of LS. Topical oestrogen is used to treat symptomatic menopausal vulvovaginal atrophy. This is an entirely different condition. My approach in menopausal women is to get the LS under control, and then use topical oestrogen only if the patient still has discomfort which is attributable to atrophy.

Surgical Therapy

Historically, vulvectomies have been performed in adults in an attempt to treat LS, but the disease recurs. This is now completely contraindicated. Various surgical procedures have been used to treat labial and peri-clitoral adhesions. Simple division of adhesions gives a very satisfactory result, provided that a careful post-operative regimen is followed. The important point is that LS flares in response to surgical incision. The corticosteroid potency is therefore increased post-operatively, and is applied twice daily until satisfactory healing is achieved. This normally takes two to three weeks. It is best to review the patient weekly during

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CURRENT OG PRACTICE 2016

Date	**Sunday, 23 October 2016**
Venue	**Ballroom, JW Marriott Hotel Hong Kong**

08:30 – 09:00	Registration	
09:00 – 09:10	Welcome	Dr. CHAN Woon Tong, Joseph
Part I	Chairperson: Prof. YEUNG Shu Biu, William | Dr. SO Wai Ki, William	
09:10 – 09:30	Development of IVF in Hong Kong	Prof. HO Pak Chung
09:30 – 09:50	Pre-implantation Genetic Testing	Dr. TANG Oi Shan
09:50 – 10:10	Surgical Management of Subfertility	Dr. Joyce CHAI
10:10 – 10:30	Oocyte Freezing - Putting Motherhood On Hold	Dr. LOK Hung, Ingrid
10:30 – 11:00	**Coffee Break**	
Part II	Chairperson: Dr. LEUNG Wing Cheong | Dr. CHAN Chong Pun, Ben	
11:00 – 11:20	Induction of Labour for Post-date Pregnancies - Earlier or Later?	Dr. LAM Sze Wing, Helena
11:20 – 11:40	Hepatitis B Carriers and Pregnancy: Should We Do More?	Dr. CHEUK Kwan Yiu, Queenie
11:40 – 12:00	The Use of Progesterone for Prevention and Treatment of Threatened or Recurrent Miscarriages	Dr. WAN Hei Lok, Tiffany
12:00 – 12:20	Practice of O&G in the Third World Countries	Dr. LI Kandice
12:20 – 13:30	**Lunch**	
Part III	Chairperson: Dr. LI Wai Hon | Dr. WONG Se Hung, Wilfred	
13:30 – 13:50	New Development in Uterine Fibroid Management	Dr. YUEN Pong Mo
13:50 – 14:10	Female Urinary Incontinence	Dr. LAU Nga Ting, Winnie
14:10 – 14:30	The Role of Laparoscopic Surgery in Gynaecological Cancer	Dr. TAM Kar Fai
14:30 – 15:00	**Coffee Break**	
Part IV	Chairperson: Prof. LEUNG Tak Yeung | Dr. LI Fuk Him, Dominic	
15:00 – 15:20	Abnormal NIPT Results – What's Next?	Dr. LEUNG Tse Ngong, Danny
15:20 – 15:40	Should Umbilical Cord Arterial PH be Routinely Measured in Modern Obstetrics?	Dr. CHAN Wan Pang
15:40 – 16:00	Use of Mifegyne (RU486) in Termination of Pregnancy and Management of Miscarriage	Dr. CHAN Woon Tong, Joseph

*Content is subject to change without prior notice

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this time. I have never found it necessary to do more extensive operations for labial fusion.

Can patients with lichen sclerosus resume normal sexual activity?

In most cases the answer is yes. Physically, particularly in younger women and those in whom the disease was treated before it became too advanced, there is usually no reason why they should not be able to resume a normal sex life.

Women who have had a long history of painful sex have usually developed significant pelvic floor spasm and may need physiotherapy to overcome this. Others admit to having developed a distaste for intercourse while they were as yet undiagnosed, and may need psychological help. There are of course many older women who decline any help to resume sex, because of their lack of interest in sex has been legitimised by their disease. Those who want to become sexually active again usually do.

Management in children and adolescents

LS in children and adolescents is managed in exactly the same way as in adults. The use of potent corticosteroids appropriate to the degree of hyperkeratosis is perfectly safe.

Historically, it was thought that childhood vulval LS improved or remitted at puberty. This is not correct. Once children with LS reach puberty, they usually require long-term management just like an adult. It is therefore essential that parents and patients understand this point. Follow-up of teenagers is difficult, because of their embarrassment about examination. A trusting relationship with their doctor prior to puberty is the best way to prevent this.

My group has recently completed a retrospective study of forty six children with LS, again comparing compliant patients with non-compliant ones. I have shown that when normal skin is attained and maintained that progression of the disease ceases and scarring and atrophy do not occur. Scarring that is present prior to treatment, however, does not reverse.

Lichen sclerosus and sexual abuse in children

Sexual abuse concerns often arise when children with LS are examined, because of the associated erosions, fissures, purpuric lesions, bleeding, and scarring.

There have been numerous reports of patients with the classic presentation of LS undergoing extensive, inappropriate evaluation for sexual abuse. The added emotional trauma to the family is completely unnecessary.

Sexual abuse is common and many retrospective studies suggest that approximately 20-25 per cent of all females have been abused as children. However children who have been sexually abused rarely have clinical signs when examined. A diagnosis of LS does not either rule out or prove sexual abuse.

CONCLUSION

The management of LS described here is safe, simple and effective. It transforms the lives of women who use it. It uses cheap and easily-available topical corticosteroids, and is easily adapted to clinical practice world-wide.

Fig 1. Lichen Sclerosus mild

Fig 2. Lichen Sclerosus moderate

Fig 3. Lichen Sclerosus severe

Fig 4. Lichen Sclerosus before Treatment

Fig 5. Lichen Sclerosus after treatment

Further Reading

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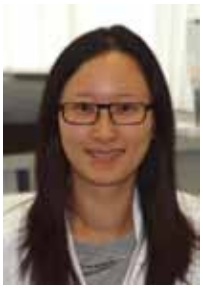
Prevention of cervical cancer – HPV vaccines



Dr Ka-yu TSE

MBBS, MRCOG, FHKCOG

Consultant, Department of Obstetrics and Gynaecology, Queen Mary Hospital

Dr Ka-yu TSE

Introduction

Cervical cancer is still prevalent especially in the developing countries. It is the fourth most common cancer in women globally and caused 528, 000 new patients and 266, 000 deaths in 2012.[1] In Hong Kong, its crude incidence rate dropped from about 14 per 100, 000 women in the late 1990s to around 10.5 in the early 2010s, and is the 7th commonest female cancer in 2013.[2] Cervical cancer is preventable because of various reasons. First, the pathogenesis of cervical cancer related to human papillomavirus (HPV) infection is well known, thus allowing the use of HPV vaccination as a primary preventive measure. Second, cervical cancer has a relatively long latent pre-invasive phase and the cervix is readily accessible. Hence, the pre-invasive lesions can be diagnosed by cervical cytology and HPV tests, and can be treated by simple local excision like large loop excision of the transformation zone (LLETZ) before progressing to malignancy. This article aims to review the relationship of HPV and cervical cancer and the use of HPV vaccines.

HPV infection

Herpes simplex virus had once been considered as the cause of cervical cancer. However, Prof Zur Hausen and his team reported the association of HPV with cervical cancer, and HPV DNA, HPV type 16, was subsequently found in cervical cancer biopsy samples in 1983.[3] HPV is a non-enveloped virus containing double-stranded circular DNA, and it typically infects the cutaneous keratinocytes and mucous membrane. To date, there are more than 200 HPV serotypes, and over 40 types are associated with anogenital tract diseases,[4] among which 12 of them are high-risk including 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58 and 59.[5] HPV is usually acquired sexually, though other routes of transmission like vertical transmission from mothers to infants have also been described. It infects the proliferating basal cells of the cervical squamous epithelium. After entering into the cells, the HPV DNA replicates and then integrates into the host genome. When the dysplasia is limited to the basal one-third of the epithelium, it was called cervical intraepithelial neoplasia (CIN) 1 when the dysplasia is limited to the basal. When the basal two-thirds of the epithelium are involved, it becomes CIN 2. When dysplastic cells replace more than two-thirds of the basal epithelium or the whole thickness of the epithelium, it becomes CIN 3. The World Health Organization has modified the nomenclature of cervical pre-invasive lesions in 2014, using the term squamous intraepithelial lesion (SIL) both cytologically and histologically for all HPV-related lower genital diseases. Hence, the previous condyloma and CIN 1 are now termed LSIL and the previous CIN 2 and 3 are called HSIL.[6] The same applies to vulval and vaginal dysplasia.

One meta-analysis showed that the prevalence of HPV infection was 11.7% in more than one million women with normal cervical cytology.[7] The prevalence was highest for those aged older than 25, and a second peak was observed at women older than 45 in America and Africa. In Hong Kong, the overall prevalence of HPV infection was estimated to be 6.7%.[8] The peak age was 26–30 years, followed by another smaller peak at 46–55 years. Young age, having multiple sexual partners in lifetime and smoking were independent risk factors for HPV infection. About half of HPV infections persist for 6–12 months and up to 70–100% can be eradicated by the host immune system in 2-5 years especially in young women.[9] 1-2% of HSIL would progress to cancer in 10 years if the lesion is not treated.

HPV vaccines

Background

HPV is present in about 90% of HSIL and more than 99% in cervical cancer.[10] HPV-16 and 18 cause about 70% of cervical cancers, while HPV 31, 33, 35, 39, 45, 52 and 58 constitute another 20% of cervical cancers.

As HPV is the causative pathogen of cervical cancer, HPV vaccines can prevent HPV infection by stimulating the host's memory B and T cells as well as circulating antibodies before the exposure of HPV. When the host is exposed to HPV later, the memory B and T cells are activated immediately and the circulating antibodies can also provide immediate protection, resulting in clearance of the virus before it can cause infection. HPV vaccines are not therapeutic, and so they are best given to adolescents before sexual debut.

HPV vaccines are composed of non-infectious virus-like particles (VLP), which is a self-assembly of the L1 protein of HPV made by recombinant DNA technology. There are now three HPV vaccines available in the world. The bivalent vaccine covers HPV-16 and 18 and is approved to prevent cervical cancer and its pre-invasive lesions, vaginal and vulval pre-invasive lesions in females at or above 9 years old. The quadrivalent vaccine prevents HPV- 6, 11, 16 and 18 -related diseases, including cervical and anal cancers and their pre-invasive lesions, vaginal and vulval pre-invasive lesions, as well as genital warts for females and males at or above

9 years old. The new nonavalent HPV vaccines prevent infections with the above four types together with five additional high-risk HPV types (31, 33, 45, 52, and 58). In Dec 2014, the US Food and Drug Administration (FDA) has approved its use in females aged 9 - 26 against cervical, vulvar, vaginal, anal cancers and their precursors (i.e. CIN 1-3, adenocarcinoma in-situ, VIN 2-3, VAIN 2-3, anal intraepithelial neoplasia 1-3) as well as genital warts, and in males aged 9 – 26 against anal cancer and its pre-invasive lesions as well as genital warts.

Efficacy

Bivalent and quadrivalent HPV vaccines have high efficacy against HPV-16 / 18- related LSIL, HSIL, adenocarcinoma (AIS) and invasive carcinoma and the efficacy. Among those who are naïve to HPV 16 and 18 before injection and adhere to the injection protocol (per-protocol group), a meta-analysis including seven randomised trials showed that prophylactic HPV vaccines had 95% efficacy rate against persistent HPV 16 and 18 infection.[11] The efficacy rate was 97 - 98% in preventing HPV 16 and 18 associated CIN 1 or worse, and over 90% for CIN 2 or worse. On the other hand, the efficacy rates in those who have been exposed to the HPV 16 or 18, and / or have variation in the compliance to the vaccination protocols (intention-to-treat group, ITT), are lower than the per-protocol group, being 75-85%, 57-78% and 50% for persistent HPV 16 and 18 infections, HPV 16 and 18 associated CIN 1 or worse, and CIN 2 or worse, respectively.

In 2015, a phase IIb – III study on about 14,000 young women at 16 – 26 years old showed that the antibody responses to HPV-6, 11, 16, and 18 after nonavalent vaccine were not inferior to those generated by the quadrivalent vaccine.[12] Besides, the rate of high-grade cervical, vulvar, or vaginal diseases irrespective of the HPV types were similar regardless of the type of vaccines given, suggesting that nonavalent vaccine was equally effective against HPV-6, 11, 16 and 18. On the other hand, the rate of high-grade cervical, vulvar, or vaginal diseases related to HPV-31, 33, 45, 52 and 58 in a pre-specified per-protocol efficacy population was 0.1 per 1000 person-years in those receiving nonavalent vaccine and 1.6 per 1000 person-years in those receiving quadrivalent vaccine, where the efficacy of nonavalent vaccine was 96.7% (95% confidence interval (CI) 80.9 - 99.8). The rate of persistent infection related to HPV 31, 33, 45, 52 and 58 lasting for 6 months also decreased with the use of nonavalent vaccine compared to quadrivalent vaccine (2.1 Vs 52.4 per 1000 person-years), making its efficacy 96.0% (95% CI 944 – 97.2). So the nonavalent vaccine was effective in preventing lesions related to HPV-31, 33, 45, 52 and 58.

In girls and boys aged 9 – 15, the antibody response to each HPV type of nonavalent vaccine was not inferior to that in young women aged 16 – 25, and the anti-HPV responses were persistent through 2.5 years after dose 3.[13] In particular, the antibody titres to HPV-6, 11, 16 and 18 were in girls aged 9 – 15 receiving either quadrivalent or nonavalent vaccines.[14]

Studies have also shown that quadrivalent vaccines are effective in preventing HPV infection and other pre-invasive lesions in the vagina and vulva. Pooled analysis of four phase II / III trials showed that the efficacy against HPV 6/11/16/18 - related VAIN or VIN 2 - 3 was 100% (95% CI 82.6 - 100%) in the per-protocol population, and was 79.0% (95% CI 56.4 - 91.0%) in the ITT population after a mean follow-up of 42 months.[15] Quadrivalent vaccine could also reduce HPV-6/11-related genital warts by 97.1% (95% CI 92.4 - 99.2%) in women who were naive to 14 HPV types (HPV-6, 11, 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, and 59) at entry, and 79.3% (95% CI 72.7 – 84.5%) in the ITT population.[16]

Women who had past infection with one or more of HPV 6, 11, 16 or 18, i.e. seropositive and DNA negative at enrollment, had reduced risk of reinfection or reactivation of disease with these HPV types after receiving quadrivalent vaccine compared to those without vaccination.[17] Those who have previous excision surgery for cervical HSIL could also benefit from quadrivalent vaccine, because it reduced 46% of HPV-related diseases and 65% of cervical HSIL.[18]

Schedule

Bivalent vaccine is injected at 0, 1 and 6 months, while the quadrivalent and nonavalent vaccines are injected at 0, 2, 6 months. For bivalent and quadrivalent vaccines, it had been shown that two-dose schedule offered similar immunogenicity and efficacy when compared to the conventional 3-dose regimen in young females.[19-21] The World Health Organization (WHO) recommended the use of 2-dose schedule with an at least 6-months interval for girls younger than 15 years old.[22] There is no maximum recommended interval between the two doses, but an interval no greater than 12 - 15 months is preferred so that the vaccination can be completed promptly before the start of any sexual activity. For nonavalent vaccine, while the safety and efficacy of the 2-dose regimen are still under investigation, the European Commission approved this regimen in girls and boys aged 9 – 14 in Apr 2016.[23,24] There are long-term data of up to nine years on the efficacy of HPV vaccines against infection and cervical lesions associated with HPV-16 and 18, and so boosters are not required.

Side effects

HPV vaccines are well tolerated. The main side effects include fatigue, headache, myalgia and local injection site reactions like pain, erythema and swelling. Nonavalent vaccine appeared to have more injection-site adverse events than quadrivalent vaccine.[25] But most were mild to moderate and only 0.1% recipients discontinued the vaccination. Adverse pregnancy events like spontaneous miscarriage and abnormal infants had been observed in 9 – 10% and 1 – 1.2%, respectively, in pregnant women receiving HPV vaccination[26,27]. Although there is no strong evidence that the vaccines have teratogenic effects, they are best avoided during pregnancy.

Prior bivalent / quadrivalent HPV vaccination

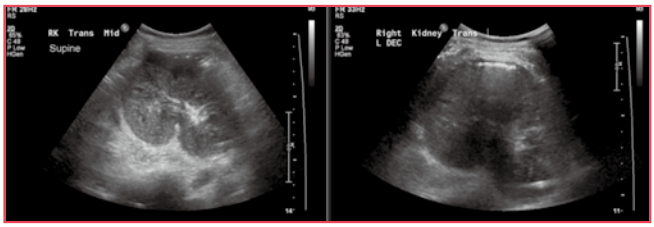
For those who are receiving either bi- or quadri-valent vaccine and now wish to receive nonavalent vaccine instead, there is no consensus on how to complete the immunisation programme. It is also unclear whether it is necessary to revaccinate with nonavalent vaccine those who have completed either bi- or quadri-valent vaccine. The European Medicines Agency advised completion of the vaccination using the same vaccine in the European public assessment report (EPAR) of individual vaccines.[23,28,29] However, the EPARs of bivalent and quadrivalent vaccines were updated in Jan

Radiology Quiz

Dr Christine LO

Department of Radiology, Queen Mary Hospital

Dr Christine LO



A 65 years old female with Diabetes Mellitus presented with fever, generalised malaise and acute renal failure. She also complained of right loin pain. Please review this patient's urinary system ultrasound.

Questions

1. What are the major abnormalities on the supine right kidney image? What happened when the patient turned left decubitus?
2. What is your diagnosis?
3. What further investigation may be helpful?

(See P.40 for answers)

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Source: 1. IMS 2010 Cord Blood Bank Market Research in Hong Kong (with Private O&G physicians) 2. Ipsos Healthcare 2009-2016 Cord Blood Bank Survey
3. Introduction to the Cord Tissue Market and Cord Tissue-Derived Mesenchymal Stem Cells (CT-MSCs)", BIOINFORMANT, Jun 2015

2015 and Aug 2014, respectively, before the authorisation of nonavalent vaccine in Europe in Jun 2015. Therefore in fact there is no recommendation whether individuals receiving bi- or quadri-valent vaccine can switch to nonavalent vaccine. On the other hand, the US Advisory Committee on Immunization Practices (ACIP) states that any available HPV vaccine product may be used to continue or complete the vaccination against HPV 16 and 18 in females.[30]

One recommendation is based on the age of the recipients at the start of the vaccination, the number of doses that has already been given, and the interval between the injections, assuming that adolescents below 15 years could have 2-dose instead of 3-dose schedule and the first two doses should be at least 6 months apart for the 2-dose regimen to be effective.[31] For example, for a girl below 15 years old, if she has received quadrivalent HPV vaccine at 0 and 6 months, she is protected from HPV 6, 11, 16 and 18. If further protection against HPV 31, 33, 45, 52 and 58 is desired, she can receive nonavalent vaccine at 12 and 18 months. Another example is if the girl has received quadrivalent vaccine at 0 and 2 months and now wishes to receive nonavalent vaccine instead, she needs to receive 2 doses of the latter at least 6 months apart in order to have protection against the nine HPV types since the quadrivalent vaccine is not effective yet with just a 2-months interval. If she just receives one dose of nonavalent vaccine at 6 months, she can only have protection against HPV 6, 11, 16 and 18. If a 25 year-old woman who had previously received 3 doses of quadrivalent vaccine and now wishes to extend the protection against the five additional HPV subtypes, she has to receive 3 doses of nonavalent vaccine at 0, 2 and 6 months again.

Conclusion

Prophylactic HPV vaccines could effectively prevent lower genital diseases in young women and men. They are most effective before their exposure to the virus, though women with previous HPV infection and even cervical dysplasia could still be benefited from the vaccines. The new nonavalent HPV vaccine can theoretically prevent 90% of cervical cancers that are associated with the nine high-risk types. Nevertheless, since the protection is not 100%, cervical cancer screening is still necessary after HPV vaccination.

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MBBS, MRCOG, FHKCOG, FHKAM (O&G), Cert RCOG (Gynae Onc)

Associate Consultant, Queen Mary Hospital

In Hong Kong, ovarian cancer is the sixth most common cancer in women, with more than 500 cases diagnosed each year, and caused 208 deaths in 2013[1]. Around one-third of these patients present with advanced disease which carries a poor prognosis. The 5-year survival rate of Stage I ovarian cancer is around 90%, which drops to below 20% for Stage IV disease[2]. Ovarian cancer was previously called the "silent killer" as the symptoms were non-specific, which resulted in delayed presentation and diagnosis in many patients. Early detection of ovarian cancer through screening tests has been the hot topic for research in the past decade. Currently, methods for detecting ovarian cancer include physical examination, serum tumour markers, and ultrasound. These modalities, either used alone or in combination, have been studied as a screening test for ovarian cancer.

PELVIC EXAMINATION

Pelvic examination is commonly performed on women as part of the annual physical examination. It involves a speculum examination to visualise the lower genital tract and a bimanual examination to check for any pelvic mass. One study found that 47% of obstetrician-gynaecologist in the States believed that pelvic examination is an effective screening test for ovarian cancer[3]. A systemic review, however, showed that the sensitivity of pelvic examination as a screening test for ovarian cancer was only 44%, and the positive predictive value of an abnormal pelvic examination was 1% in a typical screening population[4]. Pelvic examination, therefore, is not useful in the screening of ovarian cancer.

SERUM TUMOUR MARKERS

Ca125 is a glycoprotein expressed on the surface of the coelomic epithelium, and is found in the serum of healthy males and females at low concentrations. Ca125 is the most commonly used tumour marker in epithelial ovarian cancer. It is raised in about 80% of women with advanced epithelial cancer. However, it is only elevated in 50% of patients with early stage disease. Ca125 is also raised in some benign conditions, e.g. endometriosis, adenomyosis, uterine fibroids, infection, ascites or pleural effusion. As a result, a single value of Ca125 is neither sensitive nor specific enough for screening of early ovarian cancer.

Serial Ca125 measurement appears to be more useful in predicting ovarian cancer than a single value. Studies showed that Ca125 level increased significantly before the detection of ovarian cancer, whereas the Ca125 level fluctuated around an individual's own baseline value for healthy subjects without a diagnosis of ovarian cancer. This forms the basis of the Risk of Ovarian Cancer (ROC) algorithm which was used in a number of clinical trials. The ROC algorithm used an individual's age-specific incidence of ovarian cancer and Ca125 profile to estimate a woman's risk of ovarian cancer. Retrospective data showed that the sensitivity for pre-clinical detection of ovarian cancer was increased from 62% to 86% when ROC algorithm was used instead of a single Ca125 cut-off value[5]. In a prospective study by Menon et al, more than 13,000 post-menopausal women were randomly assigned to the screening group by the ROC algorithm or the control group. They reported a specificity of 99.8% and a positive predictive value of 19%[6]. The ROC algorithm was also adopted in the UK Collaborative Trial of Ovarian Cancer Screening (UKCTOS). (see below)

ULTRASOUND

Ultrasound examination is the preferred imaging modality in the initial evaluation of an adnexal mass. There are simple rules that help to classify an ovarian mass as likely benign or malignant. The reported sensitivity and specificity of such simple rules in diagnosing malignant ovarian tumour was 92% and 96% respectively[7]. The low cost, wide availability and non-invasive nature of ultrasound examination make it a potential screening tool for early detection of ovarian cancer.

Transvaginal ultrasound is preferred over transabdominal scan as it is easier to visualise the ovaries with transvaginal scan and it also provides more details of the ovarian morphology. Transvaginal ultrasound has been used in virtually all ovarian cancer screening trials. The ultrasound criteria vary between different trials, but they usually involve both ovarian volume and ovarian morphology. An ovarian volume of > 20cm^3 in premenopausal women or > 10cm^3 in post-menopausal women is defined as abnormal. Abnormal ultrasound morphology includes solid area, papillary projections, solid ovarian tumour and presence of vascularity[8].

One large screening trial by the University of Kentucky examined the use of annual transvaginal ultrasound in asymptomatic women aged more than 50 years or women aged more than 25 years with a family history of ovarian cancer. Among the 25,000 women screened, 523 (1.4%) underwent operation and a diagnosis of malignant ovarian tumour or borderline ovarian tumour

was made in 76 women. Transvaginal ultrasound screening had a sensitivity of 85.0%, specificity of 98.7%, positive predictive value of 14.0% and negative predictive value of 99.9%. They also reported a better 5-year overall survival in women diagnosed with primary ovarian cancer in the screening population compared to women treated at the same institution during the same period who were not study participants (74.8% Vs 53.7%). This study, however, was criticised for two points. One, it was a non-randomised trial without an appropriate control group. Two, it included women with positive family history which had a higher incidence of ovarian cancer and resulted in a higher positive predictive value. The results from this study, therefore, might not truly represent the effect of ovarian cancer screening in the general population[9].

COMBINED MODALITY

Many of the ovarian cancer screening trials employed both transvaginal ultrasound and serum Ca125 measurement as the screening tools.

A multi-centred randomised-controlled trial by Kobayashi et al examined the effect of ovarian cancer screening in asymptomatic post-menopausal women in Japan[10]. A total of 82,487 women were randomly assigned to the control arm and the screening arm in a ratio of 1:1. Women in the control arm received standard medical care, while the women in the screening arm had annual pelvic ultrasound and serum Ca125 level. Women with abnormal ultrasound findings and/or raised Ca125 values were referred to a gynaecological oncologist for surgical investigation. With a mean follow-up of 9.2 years, 27 cancers were detected in the screening group and 32 women developed cancer in the screening group. The proportion of stage I ovarian cancer was higher in the screened group (63%) than in the control group (38%), but the difference did not reach statistical significance (P = 0.2285). The long-term data of these patients are not available yet.

The Prostate, Lung, Colorectal and Ovarian (PLCO) cancer screening trial evaluated the effect of screening on mortality from ovarian cancer[11]. Asymptomatic women at ten screening centres in the United States were randomly assigned to the intervention group (annual screening with Ca125 and transvaginal ultrasound) or the usual care group, and the participants were followed up for a median of 12.4 years. Among the 78,216 women in the study, ovarian cancer was diagnosed in 212 women (5.7 per 10,000 person-year) in the intervention group and 176 (4.7 per 10,000 person-years) in the usual care group. The mortality rate was not different between the two groups, with 118 deaths in the intervention group and 100 deaths in the usual care group. Another important finding in the PLCO study was the potential harm of ovarian cancer screening. Among the 3,285 women with false-positive results, 1,080 underwent surgical intervention, and 163 (15%) of them experienced at least one serious complication.

The largest ovarian cancer screening trial, the UK Collaborative Trial of Ovarian Cancer Screening (UKCTOCS), recently published its long term data[12]. In this randomised controlled trial, a total of 202,638 asymptomatic post-menopausal women were randomly allocated to the multimodal screening group (Ca125 interpreted with the use of ROC algorithm and if elevated risk, proceed to transvaginal ultrasound examination), the transvaginal ultrasound screening group and the no screening group, in a ratio of 1:1:2. At a median follow-up of 11.1 years, a total of 1,282 ovarian cancers were diagnosed: 338 (0.7%) in the multimodal group, 314 (0.6%) in the ultrasound group, and 630 (0.6%) in the no screening group. Of these women, 148 (0.29%) women in the multimodal group, 154 (0.30%) in the ultrasound group, and 347 (0.34%) in the no screening group had died of ovarian cancer. The results of this study showed that the mortality reduction was not significant with either of the screening methods. When the prevalent cases were excluded from the analysis, however, significantly different death rates were observed in favour of the multimodal screening group, with an overall mortality reduction of 20%. These findings were encouraging, however, further follow-up would be needed before firm conclusions could be reached on the efficacy and cost-effectiveness of ovarian cancer screening.

WHY IS IT SO DIFFICULT?

There are several reasons to explain why screening for ovarian cancer is difficult.

Aetiology

Ovarian cancer is a heterogeneous disease. Ovarian cancer can be broadly divided into two types – Type I tumours (endometrioid, clear cell, mucinous and low-grade serous histology) are slow-growing tumours, and are usually confined to the ovaries at presentation; Type II tumours (high-grade serous histology) are rapidly progressing tumours, and emerging data suggest that most of the high-grade serous ovarian cancers, in fact, originate from the fimbrial end of the fallopian tubes[13,14].

Type II tumours account for about two-thirds of all ovarian cancers. If the precursor lesion of these high-grade serous adenocarcinomas is microscopically located in the fallopian tubes, it is impossible for a transvaginal ultrasound to detect these microscopic tumours, and the small-volume precursor lesions may not produce detectable serum tumour markers.

Low incidence

In Hong Kong, the incidence of ovarian cancer is around 25 per 100,000 women at the age of 50. As a result, 4,000 women need to be screened to detect one ovarian cancer. If a certain screening test has a 1% false-positive rate, 40 women would have false-positive results, and the positive predictive value would be only 2.4% (1/41). The positive predictive value would be even lower in the older age group because of the lower incidence of ovarian cancer in these women.

Invasive Diagnostic Test

A diagnosis of ovarian cancer can only be made by histology. Women have to undergo at least a laparoscopy for surgical excision, and many women will have a laparotomy because of the presumptive diagnosis of ovarian cancer. Major complications have been reported in 3-15% of women undergoing an operation for a positive screening test for ovarian cancer [11,12].

The lack of a detectable precursor lesion, the low incidence of the disease and the need for an invasive diagnostic test all contribute to the difficulty of screening for ovarian cancer.

SYMPTOMS AWARENESS

Historically, ovarian cancer was called the "silent killer" because symptoms were not thought to occur until advanced disease. Recent studies, however, have shown that symptoms are common in ovarian cancer patients, although they can be non-specific. One retrospective study showed that 95% of ovarian cancer patients recalled developing symptoms 3-6 months before seeing a doctor, with the most common reported symptoms being increased abdominal size and bloating. Gynaecological symptoms were relatively uncommon[15]. A prospective case-control study showed that the most common symptoms of ovarian cancers are bloating, increased abdominal size, urinary symptoms, pelvic and abdominal pain. Women with ovarian cancer in this study typically experienced more frequent symptoms (20-30 times per month compared to 2-3 times per month) and had significantly more symptoms of higher severity and more recent onset than women with benign masses or controls[16]. The American College of Obstetricians and Gynecologists suggested that the best way to detect ovarian cancer is for both the patient and her clinician to have a high index of suspicion of the diagnosis in symptomatic women.

CONCLUSION

Ovarian cancer screening cannot be recommended for the general population until further evidence is available. A high index of suspicion is important in the early detection of ovarian cancer in women presented with recent onset of frequent abdominal or pelvic symptoms.

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Menstrual disorders in adolescents

Dr Charleen Sze-yan CHEUNG

MBBS(HK), MRCOG, FHHAM(O&G), FHKCOG

Resident Specialist
Department of Obstetrics and Gynaecology Queen Mary Hospital

Dr Charleen Sze-yan CHEUNG

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 October 2016.

Adolescence is defined as a period of human growth after childhood and before adulthood, from age 10 to 19[1]. It is a time of critical transitions in life when a person undergoes much biological, psychological and social changes and adaptations. Menarche denotes the start of reproductive capacity and is an important female biological milestone. Recent opinion from the American College of Obstetricians and Gynecologists (ACOG) implants the concept of menstruation as an additional vital sign. It should be included in the evaluation of the overall health status of women, including adolescent girls[2].

Normal variation in menstruation

Despite a notable decline in the age of onset of puberty and wide variations across the world, the average age of menarche in most developed regions including Hong Kong remained stable between 12 to 13 years. There was a slight decrease from 12.9 to 12.3 years over the past two decades[2-4]. Age of menarche had no impact on the menstrual cycle length. Menstrual cycles are often irregular and more variable in adolescents than adults because of the immature hypothalamic-pituitary-ovarian axis. Most of these are self-limiting. The mean cycle length is 32.2 days, but can range from 21 to 45 days as in adult women[3]. Cycles are expected to show increasing regularities with time. The majority (80-90%) of girls would have normal regularity by the third gynaecological year[1,4]. Absent menstrual flow for 90 days are likely associated with underlying medical conditions. Menstrual flow in adolescents, as in older women, typically lasts from 2 to 7 days. Girls usually use 3-6 pads/tampons per day in a normal period. The rate of pad/tampon change more than every 1-2 hours has been shown to correlate with measured blood loss and bleeding >80mL/period and has been associated with the development of anaemia[5]. A prospective record using the menstrual calendar provides valuable information on the menstrual patterns. Menstrual conditions that are beyond statistically derived norms should prompt evaluation to exclude underlying pathologies.

High prevalence of menstrual disorders, low rate of seeking advice

Menstrual disorders such as menorrhagia, dysmenorrhoea, abnormal menstrual length are common in adolescents, but often overlooked. Hickey et al reported that 75% of adolescent girls encountered menstrual problems[6]. Adolescents and caretakers are often unfamiliar and lack knowledge about normal and abnormal periods. Girls may be reluctant to discuss menstrual problems with caretakers. Many do not seek medical attention and are not aware that their abnormal menstrual patterns may be attributable to significant underlying health conditions with potential long-term consequences. Some may seek attention even if the menstrual pattern falls within normal[2]. A study involving 5,609 Chinese girls in Hong Kong revealed that one in eight adolescent girls had taken sick leave from school because of menstrual problems. However, only a minority (6.4%) sought medical advice[4]. Cultural beliefs, parenting style, embarrassment to discuss the topic, fear of disease and ignorance about available services may explain their health seeking behaviour and contribute to underutilisation of health care services in Hong Kong[4,6].

Dysmenorrhoea

Dysmenorrhoea is the most common menstrual complaint among adolescents[7]. Its prevalence ranges between 55 to 94%[8-11]. It was found in a local study that 68.7% Hong Kong Chinese girls experienced dysmenorrhoea. In addition, 37.7% reported menstrual related symptoms including breast tenderness, backache, and abdominal bloating[4]. Clarification of the history, pattern of the pain helps in excluding the differential diagnoses such as irritable bowel symptoms, urinary or genital tract infections, musculoskeletal causes of pain. Dysmenorrhoea tends to increase with the menstrual age, and endometriotic cyst is uncommon before the mid-20s. However, in girls who present with amenorrhoea and significant abdominal pain or dysmenorrhoea not responsive to treatment, congenital anomaly has to be considered. An imperforated hymen is apparent on physical examination. Ultrasound scan may reveal haematocolpos above the vaginal septum, or from the blind horn of uterus. These conditions may result in pelvic endometriosis if not diagnosed and treated promptly. Management of dysmenorrhoea is similar to that in adults, from non-pharmacological strategies using massage and heat pads, to oral analgesics or non-steroidal anti-inflammatory drugs (NSAID). Combined oral contraceptive pills can also be safely administered to adolescent girls for control of menstrual symptoms[7,12]. Apart from absence from school and influence on school

performance, one study also found that adolescents with dysmenorrhoea had a lower quality of life and poorer score in physical function[13]. Despite the physical discomfort and social inconvenience resulted from dysmenorrhoea, the majority of Hong Kong Chinese girls expressed reservations to medication use as worried about dependence and side effects. Most of them would adopt food and exercise restriction and prefer heat pads for symptomatic relief[14].

Menorrhagia

In the same local survey, about 18% of adolescents complained of menorrhagia[4]. Heavy menstrual bleeding in adolescents is primarily due to anovulation and can be managed by hormonal therapy. A small number pilot study showed the same efficacy of using tranexamic acid compared with combined oral contraceptive pills in controlling heavy menstrual bleeding in adolescents[15]. Flexibility in administration of tranexamic acid is less likely to cause non-compliance for long term therapy. In the Chinese population, there are still various myths or misconceptions about oral contraceptive pills, leading to low acceptance and prescription in adolescent girls with menstrual disorders. Oral low-dose luteal phase progestogens are not effective in treating menorrhagia. Progestogens are effective if given for 21 days or more out of 28 days. Cyclical oral progestogens may be required in adolescents until spontaneous regular ovulation occurs. Drawbacks of progestogen regimens include non-compliance in the long term and possible side effects of pre-menstrual symptoms[6]. The Levo-norgestrel releasing intrauterine system (Mirena) is a highly effective first-line treatment for heavy menstrual bleeding in adults. Its use is limited in adolescents because of sexual inactivity and the need for insertion under anaesthesia. It can be reserved for cases refratory to medical or hormonal treatment.

It is worth noting that coagulopathy often presents with menorrhagia in the early years of reproductive age. Von Willebrand disease (vWD) and platelet dysfunction are two most common haematological causes. In the United States, the prevalence of vWD is 1-2% in the general population and up to 13-20% in women with heavy menstrual bleeding[2]. In Hong Kong, a study found 6% prevalance of vWD in women presented to gynaecological clinics with unexplained menorrhagia[16]. The condition can be readily screened by simple questionnaires and basic blood tests. Patients may benefit from the addition of non-hormonal therapies. Identification of this group of women at younger age also allows appropriate counselling and preparation for future pregnancy or surgery.

Oligomenorrhoea / amenorrhoea

Oligomenorrhoea is defined as menstruation occurring less frequently than every 35 days. Secondary amenorrhoea is the absence of menstruation (temporary or permanent) of more than 6 months' duration. Any cause of secondary amenorrhoea may also cause primary amenorrhoea. The commonest cause of oligo-/amenorrhea is polycystic ovarian syndrome (PCOS)[5-6]. Other causes include temporary disturbances of menstrual cycle control, obesity or underweight, hyperprolactinaemia (see Table 2). Primary amenorrhoea is defined as the failure to menstruate by age 16 in the presence of normal secondary sexual development, or by age 14 in the absence of secondary sexual characteristics. Overall, it is estimated that endocrine disorders account for about 40% of primary amenorrhoea, the remaining 60% having developmental abnormalities (see Table 3)[6].

Table 1: Menstrual conditions that may require further evaluation

- Menstrual periods that have not started
  - within 3 years of thelarche
  - by age 13 with no signs of pubertal development
  - by age 14 with history suggestive of eating disorder; or
  - concerns of outflow tract obstruction / anomaly
  - by age 15
- Initial regular periods, that become markedly irregular
- Cycle lengths <21 days or >45 days
- >90 days apart even for one cycle
- Last >7 days
- Frequent pad changes (>1 every 1-2 hours)

Menstruation in girls and adolescents: using the menstrual cycle as a vital sign. ACOG Committee Opinion Number 651. Dec 2015.

Table 2: Causes of oligomenorrhoea / secondary amenorrhoea

Pregnancy
Hypothalamic (hypogonadotrophic hypogonadism)
Hypopituitarism
Hyperprolactinaemia
Other cranial pathologies
Significant weight change (intense exercise and weight loss / obesity
Local causes: endometritis, ovarian pathologies
Polycystic ovarian syndrome
Premature ovarian insufficiency
Systematic illnesses: SLE, thyroid disorders, diabetes mellitus
Drugs: GnRH analogues, progestogens, anti-psychotics, cocaine and opioids causing central effects

Table 3: Causes of primary amenorrhoea

Constitutional delay
Structural abnormalities
Mullerian agenesis (eg. Mayer-Rokittansky-Kuster-Hauser syndrome)
Vaginal septum
Imperforated hymen
Androgen insensitivity
Hyperprolactinaemia
Premature ovarian insufficiency (usually genetic, eg. Turner syndrome)
Hyperprolactinaemia / prolactinoma
Kallman syndrome
Other CNS causes (eg. head injury / cranial tumour / irradiation)
Stress / weight loss / anorexia
Polycystic ovarian syndrome
Congenital adrenal hyperplasia
Endocrine disorders (eg. thyroid disease, Cushing's disease)
Systematic causes, chronic illnesses

The sexual history should be included in the gynaecological history taking from an adolescent girl. Pregnancy should be excluded in all cases of

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oligomenorrhoea or amenorrhoea. A pregnancy test should be considered even if sexual activity is denied, since adolescents may feel uncomfortable to confide in clinicians about this[17]. Examination of girls with amenorrhoea includes assessment of the pubertal development and attention to stigmata of hyperandrogenism and endocrine disorders. Evaluation of the hormonal profile allows us to differentiate hypo- vs hyper-gonatotrophic causes, and imaging for pituitary and hypothalamus should be arranged if necessary. Ultrasound scan of the pelvis for assessment of uterine and ovarian morphology is usually suffice. Additional magnetic resonance imaging is needed if there is any complex anatomical problem. For girls with premature ovarian insufficiency, the karyotype should be checked. Common genetic causes include Turner syndrome, fragile X premutation carrier. Gonadectomy is mandatory if there is a detectable Y chromosome because of risks of malignancy[18]. Screening for anti-adrenal antibodies and thyroid function tests should be carried out to watch out for Addison's disease and thyroid dysfunction[6]. Amenorrhoea associated with ovarian insufficiency or disorders of sexual development require a high sensitivity but openness in disclosure. Referrals for multi-disciplinary care in designated centres are beneficial for the holistic management of patients and counselling of the family.

With a prevalence of 5-7%, PCOS is now recognised as the most common endocrinopathy in women of reproductive age[19]. Diagnosis of PCOS in adult women follows the 2003 Rotterdam consensus, which includes two of the following three criteria: oligo- and/or anovulation, clinical and/or biochemical hyperandrogenism, and polycystic ovaries on ultrasound; other aetiologies must be excluded[20]. Local data from adolescent gynaecological clinic attendants revealed that 27% of girls presented with oligomenorrhoea and 77% presented with secondary amenorrhoea suffered from PCOS. It was also found that a high BMI of more than 23 kg/m^2, long cycle lengths and fulfilling diagnosis of PCOS at first consultation were associated with persistently long cycles at follow-up[21]. The diagnosis of PCOS in adolescence is controversial. This is due to the overlap between normal pubertal development and features of PCOS - increased hair growth and acnes are common during puberty; reduced sex hormone-binding globulin and raised androgen in pubertal girls; polycystic morphology of ovaries can be found in about one third of adolescent girls. Thus, the diagnosis of PCOS in adolescents requires fulfilling all three Rotterdam criteria, and excluding other disorders associated with irregular menstruation or hyperandrogenism[22,23]. Long-term follow up and management are necessary for this group of girls because PCOS is associated with long-term health implications including risks of endometrial hyperplasia and the metabolic syndrome. Attention should also be paid to the psychological impacts associated with the diagnosis and its labelling effect. Amenorrhoea was often associated with poor self-esteem[13]. Body weight issue was found to have negative impacts on the quality of life[24]. Further studies are required for better understanding of the extent and psycho-social challenges of PCOS to these girls.

Conservative management can be adopted for girls with long cycles who are screened out for PCOS. Girls who are obese should be advised on weight reduction. Treatment of oligo-amenorrhoea involves cyclic progestogen to induce withdrawal bleeding and avoid unopposed oestrogenic stimulation to the endometrium. Special groups of girls including those participating in intense physical training or suffering from eating disorders typically present with oligomenorrhoea or amenorrhoea. There is a strong link to bone health and should be alerted. A prolonged hypoestrogenic state carries risks of bone demineralisation and adverse health consequences. Therefore, secondary ameonorrhoea associated with low oestrogen levels requires oestrogen supplementation to maintain bone density[6].

Summary

Adolescence is often a neglected population in health care. Menstrual disorders in adolescence is common but should not be ignored. Although most menstrual problems resolve with time, some are attributable by underlying health pathologies and have considerable physical and psychological consequences. They can also cause significant disturbance to school and daily activities, negative body images and impacts to quality of life. Proper evaluation of abnormal menstrual patterns allows timely and appropriate management of underlying gynaecolgical and medical conditions. Reinforcing education on the knowledge of normal pubertal development and female health not only involves adolescents and caretakers, but also colleagues in various disciplines, as well as health educators and the media. It is our aim to provide suitable health services to adolescent girls, to restore and maintain normal menstruation, and improve the overall health status during their transition period into adulthood.

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MCHK CME Programme Self-assessment Questions

Please read the article entitled "Menstrual disorders in adolescents" by Dr Charleen Sze-yan CHEUNG 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 October 2016. 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. The average age of menarche of Hong Kong Chinese girls is between 12 to 13 years.
2. Adolescent girls seldom have absence from school because of menstrual problems.
3. Dysmenorrhoea is the most common menstrual complaint among adolescent girls.
4. There is good evidence that tranexamic acid is more effective than combined oral contraceptive pills in controlling heavy menstrual periods in adolescents.
5. Menorrhagia may be the presenting symptom of underlying coagulopathy.
6. Endocrine disorders account for 70% of primary amenorrhoea.
7. Sexual history should only be discussed in selected cases to avoid embarrassment of adolescents.
8. Gonadectomy is recommended if there is a detectable Y chromosome in an adolescent who presents with primary amenorrhoea.
9. Polycystic ovarian syndrome is the most common endocrine disorder in women of reproductive age.
10. In girls with prolonged amenorrhoea, cyclic oestrogen should be used to induce withdrawal bleeding and avoid hyperstimulation of endometrium by progestogen.

ANSWER SHEET FOR OCTOBER 2016

Please return the completed answer sheet to the Federation Secretariat on or before 31 October 2016 for documentation. 1 CME point will be awarded for answering the MCHK CME programme (for non-specialists) self-assessment questions.

Menstrual disorders in adolescents

Dr Charleen Sze-yan CHEUNG
MBBS(HK), MRCOG, FHHAM(O&G), FHKCOG
Resident Specialist
Department of Obstetrics and Gynaecology Queen Mary Hospital

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Name (block letters):_____ HKMA No.: _____ CDSHK No.: _____

HKID No.: __ __ - __ __ __ __ X X (X) HKDU No.: _____ HKAM No.: _____

Contact Tel No.:_____ MCHK No.: _____ (for reference only)

Answers to September 2016 Issue

Advances in management of non-cystic fibrosis bronchiectasis

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

Use of Mifepristone in Medical Abortion

Dr Joyce CHAI

LMCHK (MBChB, University of Otago, New Zealand), MRCOG, FHKCOG,
Cert RCOG (Reprod Med), Cert HKCOG (Reprod Med), FHKAM (Obstetrics and Gynaecology)

Specialist in Obstetrics & Gynaecology
Honorary Clinical Assistant Professor (HKU)

Dr Joyce CHAI

Introduction

Among the 208 million women estimated to become pregnant each year worldwide, 41% (or 85 million) of pregnancies are unintended,[1] and therefore maternal requests for abortion are commonly encountered by family physicians or gynaecologists. According to statistics report in Hong Kong, it indicates that in the year of 2013, the number of births was around 57,084, whereas the number of legally induced abortions was about 10,653.[2] Legal abortion is allowed in Hong Kong of up to 24 weeks gestation and the most appropriate methods of abortion differ by the duration of pregnancy. Before the availability of prostaglandin (PG) analogues, dilatation and evacuation was the commonest method used for termination of pregnancy. Since the introduction of PG analogues in the late 70s and the availability of mifepristone in the 90s, the management of termination of pregnancy has changed significantly. Nowadays, medical abortion is the method of choice in many centres that perform termination of pregnancy, and this medical method has been well accepted by women.[3]

Prostaglandin and its analogues

The introduction of PG and its analogues is a breakthrough in the field of medical abortion and their use has improved the efficacy of abortions. Prostaglandins are a group of lipid compounds that have the ability to stimulate myometrial contraction leading to expulsion of the conceptus. Naturally occurring PGE_1 or $PGF_2\alpha$ has a high incidence of gastrointestinal side-effects including diarrhoea, nausea and vomiting;[4] Prostaglandin analogues, synthetically made to resist enzymatic degradation, have a longer half-life and a more selective action on the myometrium than naturally occurring PGs. Among all PGE analogues, misoprostol is most extensively studied and used in Hong Kong nowadays. Misoprostol is a PGE_1 analogue marketed for use in the prevention and treatment of peptic ulcer. Its abortifacient effect and its low cost and stability at room temperature have led to its 'off-label' use in medical abortion. It is now the PG analogue of choice for abortion care recommended by the World Health Organization (WHO) and the UK Royal College of Obstetricians and Gynaecologists (RCOG).[5,6]

Misoprostol is rapidly absorbed by the vaginal, sublingual, buccal and oral routes. Vaginal administration appears to be the most efficient and is better tolerated when compared to both oral and sublingual regimens.[7] Vaginal misoprostol is the recommended route of administration, although it may be less acceptable for some women. At the onset of bleeding a non-vaginal route is usually preferred as the presence of blood may decrease misoprostol absorption when the drug is given vaginally.[8] Commonly reported side effects of misoprostol include nausea, vomiting, diarrhoea, chills and fever, and gastrointestinal symptoms are less common when it is given vaginally.[7,9]

Progesterone receptor modulator – mifepristone

A big turning point in medical abortion came when the French scientist Etienne-Emile Baulieu and colleagues at the French pharmaceutical company Roussel-Uclaf developed mifepristone or RU-486, as it was initially called.[10] Mifepristone is an orally active progesterone antagonist at the receptor level. It blocks the receptors for progesterone which is essential to maintain the uterus in a quiescent state in order to sustain a pregnancy. Mifepristone not only inhibits the action of progesterone, it also increases the sensitivity of the uterus to prostaglandins. The maximal effect of the sensitisation was seen when the interval between mifepristone and the PG analogue was 36-48 hours. The synergy between mifepristone and PG permits greater efficacy of PG at lower doses and achieves a shorter induction-abortion interval when compared to regimens in which either agent is used alone regardless of the gestation.[7,11] Mifepristone was first registered for medical abortion in France and China in 1988. By 2013, mifepristone was registered in 60 countries and it was eventually registered in Hong Kong on 8 April 2014 for medical abortion.[12,13] The availability of mifepristone gives women in Hong Kong access to what is arguably an important reproductive health advancement - a combined treatment using mifepristone followed by PG analogues for medical abortion in both the first and second trimesters with a high efficacy of more than 90%.

Contraindications to mifepristone

Mifepristone is a potent anti-glucocorticoid and may potentially impair the action of cortisol replacement therapy in women with adrenal insufficiency. Women with known inherited porphyria are contraindicated for mifepristone use as it has been shown to induce δ-aminolevulinic acid synthetase and mRNA at concentrations observed in human plasma after a single oral dose.

Abortions of up to 9 weeks' (63 days) gestation

Medical abortion regimens using 200 mg oral mifepristone and misoprostol are effective and appropriate at any gestation.[6] It has been shown that a dose of 200 mg mifepristone has similar efficacy compared with 400 mg or 600 mg, and as a result the cost of mifepristone can be largely reduced.[14] The combined use of 200 mg mifepristone followed by 800 mcg misoprostol administered via the vaginal, buccal or sublingual routes 24-48 hours later is the recommended regimen for medical abortions of up to 9 weeks' gestation. It has been proven highly effective and safe with complete abortion rates up to 98%.[15] Misoprostol given orally at a dose of 400 mcg should only be restricted to pregnancies of up to 7 weeks' gestation, given its higher failure rate when given orally as pregnancy progresses. Following administration of the misoprostol, up to 90% of women will expel the products of conception over the following 4-6 hours. Most women are likely to require medication for cramping pain during this period of time. Women should be informed that medical abortion at this gestation does not completely eliminate the need for surgical evacuation and approximately 2-5% of women will require surgical intervention to resolve an incomplete abortion, termination a continuing pregnancy, or control bleeding.

Abortions of from 9 to 13 weeks' gestation

The posology of mifepristone indicates its use for first trimester medical abortions of up to 9 weeks of gestation, the treatment is also effective after 9 weeks of gestation. Data suggest that during this period the most effective medical regimen is mifepristone 200 mg orally followed by 36-48 hours later by misoprostol 800 mcg vaginally. A maximum of four further doses of misoprostol 400 mcg may be administered at three-hourly intervals, vaginally or sublingually.[16] Because results are promising with a complete abortion rate of up to 95%,[6] medical abortions may also be offered to women at the gestation age of 9-13 weeks.

Abortions of over 13 weeks' gestation

An oral dose of 200 mg mifepristone followed 36-48 hours later by an initial dose of misoprostol, either 400 mcg orally or 800 mcg vaginally, with further doses of 400 mcg of vaginal or sublingual misoprostol every 3 hours, up to four further doses is highly effective. This combined regimen offers the safest and most expeditious method with an abortion rate at 24 hours as high as 96% and a median induction-abortion interval as low as six hours.[11] Shortening the mifepristone-misoprostol interval to 24 hours[17] or giving both medications simultaneously[18] compromised efficacy with a longer induction-abortion interval and a higher requirement for misoprostol; hence it is not the method of choice.

For pregnancies beyond 24 weeks' gestation, the dose of misoprostol should be reduced, due to the greater sensitivity of the uterus to prostaglandins, but the lack of clinical studies precludes specific dosing recommendations.

Legal aspect

In Hong Kong, legal abortions can be performed in registered institutions in accordance with the legal requirements stipulated in the Offences against the Person Ordinance Cap 212. Termination of pregnancy is legal when a pregnancy is terminated by a registered medical practitioner if two registered medical practitioners are of the opinion that the continuance of the pregnancy would involve risk to the life of the pregnant woman or of injury to the physical or mental health of the pregnant woman, greater than if the pregnancy were terminated; or there is a substantial risk that if the child were born, it would suffer from such physical or mental abnormality as to be seriously handicapped. It is required by law that any treatment for the termination of pregnancy must be carried out in a hospital or clinic maintained by the Government or declared by the Direction of Health by notice published in the Gazette to be an approved hospital of clinic for the purpose. As a result, it is mandatory that both mifepristone and misoprostol be dispensed and administered in institutions listed in the Gazette as a legal abortion provider. The drug provider cannot sell mifepristone to an individual doctor or pharmacy store, and any person who unlawfully supplies or procures drugs with the intention to procure the miscarriage of any women, shall be guilty of an offence.

In countries like the United States, mifepristone must be dispensed in offices/clinics and most clinicians give women the misoprostol at the initial visit for her to take at home, eliminating an unnecessary visit to the clinic. In Australia, a composite package including 200 mg mifepristone and four tablets of misoprostol 200 mcg was registered in 2015, which requires prescribing by a physician and may be dispensed at pharmacies. In Hong Kong, women seeking medical abortion service will need to attend hospital/clinic at least twice for administration of mifepristone followed by misoprostol. The 24-48 hours dosing interval between mifepristone and misoprostol poses problems in the clinical setting including an increased duration of treatment, the requirement of repeat attendance at the hospital for drug administration and the fact that 0.2-0.4% of women may abort after the administration of mifepristone but before the administration of misoprostol.[19]

Conclusion

The availability of mifepristone is certainly an advancement in medical abortion with higher efficacy when compared to misoprostol-only regimen. With the high rate of unintended pregnancy and the increasing use of antenatal diagnosis to detect anomalies, the need for abortion is likely to remain. Healthcare providers should be familiar with the regimens available so women who are eligible for medical abortion are fully counselled and informed of their options in order to improve their satisfaction rates.

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MBChB, MRCOG, FHKAM(O&G), MPH
Consultant, Department of O&G, Tseung Kwan O Hospital

Dr Lowina Hei-yee TSE Dr Mona Wai-cheung LAM

It was ninety years ago when Dr Papanikolaou performed cytological examinations of vaginal smears, initially for "early" diagnosis of pregnancy. A few years later, he presented his paper "New Cancer Diagnosis" after studying vaginal smears collected from cancer patients. Subsequent development and impact on public health are well known to all of us. Although cervical screening has been shown to reduce mortality and morbidity of cervical cancer, uptake of cervical screening varies among different women groups, even in countries with National Screening programme like Australia. Knowing that a lower socio-economic status is a factor for low uptake of cervical screening, volunteers from the Hong Kong Women Doctors Association, in collaboration with social workers and volunteers from other non-governmental organisations (NGO), have conducted community cervical screening for marginalised women in different regions in Hong Kong since 2008. Some of the women attending these events never had a smear done before.

In the planning of community cervical screening events, a site visit to the venue is a must. There should be a room that can be transformed into a make-shift clinic for cervical screening with adequate privacy. Sometimes the collaborating NGO was able to get support from a local school. The school principal would allow us to use a classroom, a laboratory or even a gymnasium. We have to make sure that the window blinds work properly and exhibition boards are available as partition since there will be two teams working side by side to complete taking cervical smears for 80 to 90 women in an afternoon. Sometimes we need to add used posters to cover the space between exhibition boards and/ or occasional windows without blinds. A big room is good but too spacious an area may not always be a good idea. Once we conducted cervical screening in a gymnasium of a school in Tin Shui Wai. As a "millennium school", the school is well equipped and the gymnasium has a high ceiling. One of the participants actually complained that she felt exposed even though we had adequate partitions around. If a local school is not available, the community cervical screening will take place in the Community Centre or Town Hall. There is usually a function room that fits the purpose.

On the day of event, we have to bring along items including cervical smear kits, disposable speculums, gallipots, masks, examination gloves, disinfectant hand rubs, smear request forms and labels. It takes around an hour to turn the site into a make-shift clinic. If a long table for use as the examination couch is not available, as in the usual case of a classroom, several desks are placed together to form a couch. A yoga mat is put on top of the "couch". To avoid cross-infection, a piece of incontinence pad or clean wrapping sheet for the disposable surgical set is placed on top of the mat for each woman. These women recruited by social workers or local NGOs, are usually new immigrants from the China Mainland or ethnic minorities. They are "clients" of social workers due to different reasons including financial, socio-psychological and/or housing problems, etc. Occasionally they will bring along a few friends. Some years ago in Tung Chung, a group of Pakistani women turned up in their traditional costumes, led by a more sociable fellow countrywoman, as some of them never participated in community service events before because they did not understand English or Cantonese.

Women of ethnic minorities form a special group of marginalised women in Hong Kong. With low education level in their homeland to start with, some women have extra difficulty in coping with the new environment in Hong Kong. In an event in Tsuen Wan, a Pakistani woman was noted to have a displaced intra-uterine contraceptive device lodged at the cervical canal. She was given a referral letter to the Specialist Gynaecology Clinic of a nearby public hospital right away. One month later when women with positive smear results were called back for counselling and referral letters given, our volunteer met this woman again. When asked if she had booked an appointment in the Specialist Gynaecology Clinic already, she could not give an answer initially. With the help of an interpreter, we came to understand that she was too busy with her household chores and she did not know the way to the hospital. Moreover, the referral letter was lost. Another referral letter was given and help of social workers was solicited to ensure that this woman would get an appointment.

One of our collaborating partners is the Association Concerning Sexual Violence Against Women, which set up the first one-stop crisis centre in Hong Kong, RainLily, to help female sexual violence victims in November 2000. RainLily identified the problem of sexual harassment and sexual assault among migrant workers and ethnic minority women and started a projected entitled the 'WE Stand Programme' in 2012 to support these groups of sexual violence survivors. Different from local victims, they may need extra services such as interpretation, emergency shelters and financial support.

In the event "We Stand" Women's Health Day which has taken place at the Anti-480 Resource Centre, staffs

of RainLily arranged assertive training for the ethnic minority women, to increase their knowledge on sexual harassment and sexual violence, to clarify rape myths, to enhance their self-efficacy and confidence, and to introduce Rainlily's services. Then women doctor volunteers gave health talks on cervical cancer and performed free cervical screening. Considering the different languages, participants were divided into different groups: those from the Philippines did not require interpreters; Bahasa interpreters were arranged for those from Indonesia; Nepali and Urdu interpreters were arranged for those from Pakistan, India and Nepal.

A room at the Anti-480 Resource Centre was transformed into an examination room, setting a physiotherapy couch, hanging up curtains to secure privacy. Simple diagrams were prepared in different languages to show them how to put themselves in a frog-leg position. The women felt embarrassed to take off clothing for cervical smear screening, more time was required to put them at ease. All the laboratory results were screened, and those with abnormal results were counselled and referred for further management.

Occasionally, women with abnormal results could not be contacted by the social workers and were lost to follow up. It remains the biggest hurdle to the success of this smear programme. Cultural and religious difference is another challenge. Gender, culture and religion sensitivities should be emphasised when providing services to ethnic minority and migrant workers. As woman doctors, we have the privilege to be trusted by them as we are seen to have a better understanding of their need, fear, and pain. Once, a Nepalese lady gave one of the co-authors a big hug after her first ever cervical smear in our event. Hence, despite all the difficulties, it is encouraging and fulfilling to participate in this work.

We would like to take this opportunity to thank all our volunteer doctors, nurses and medical students who have participated in the community cervical screening events. Special thanks are dedicated to the Dr Ellen Li Charitable Foundation for providing financial support in the laboratory costs.

Fig.1 Health talk before cervical screening

Fig.2 Entrance to room with adequate proiacy

Fig.3 Working table

Fig.4 Examination couch

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Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	★ HKMA Yau Tsim Mong Community Network – Conservative Management of Renal Failure due to Diabetic Nephropathy and the Amino Acid Ketoanalogues Revisited ★ FMSHK Officers' Meeting ★ HKMA Council Meeting 4	★ HKMA Central, Western & Southern Community Network - Certificate Course on Dermatology (Session 3) - Approach to Atopic Dermatitis 5	★ HKMA Kowloon East Community Network - New Treatment for Heart Failure Patients ★ HKMA New Territories West Community Network - Ambulatory Blood Pressure Monitoring ★ HKMA Hong Kong East Community Network – Update on Prevention of COPD Exacerbations 6	★ HKMA Shatin Doctors Network - Rotavirus Infection in Children: Disease Burden and Prevention 7	★ HKMA Kowloon East Community Network - Advanced Training Course on Dementia for Primary Care Doctors (Session 3): A. Behavior and Psychological Symptoms of Dementia (BPSD) B. Neuro-psychological Assessments ★ Refresher Course for Health Care Providers 2016/2017 ★ The 9th Hong Kong Allergy Convention - Novel Strategies for Prevention and Treatment of Allergic Disorders Organiser: Hong Kong Institute of Allergy 8
★ The 9th Hong Kong Allergy Convention - Novel Strategies for Prevention and Treatment of Allergic Disorders Organiser: Hong Kong Institute of Allergy 9	10	11	★ Hong Kong Neurosurgical Society Monthly Academic Meeting –Craniofacial pain syndrome ★ MPS Workshop - Mastering Your Risk Workshop 12	★ The HKMA Clinic Management System (CMS) Yuan Wang (YW) District Seminar in Kowloon East ★ HKMA Structured CME Programme with HKS&H Session 9: Current Management of Asthma in Adults ★ FMSHK Executive Committee Meeting 13	14	★ HKMA KECN, HKCFP & UCH – CME Course for Health Personnel 2016 (Session 4) - Update on Dizziness and Vertigo ★ HKMA New Territories West Community Network - Pearls for the Early Identification of Inflammatory Arthritis ★ MPS Workshop - Mastering Adverse Outcomes Workshop - 2 hours 15
★ HKMA Bridge Tournament 2016 (IMP Pairs) 16	17	★ HKMA Kowloon West Community Network - Update on the Management of Chronic Hepatitis B 18	★ HKMA Kowloon City Community Network - Management of DM and Hyperlipidemia in Chronic Kidney Disease Patients ★ HKMA Shatin Doctors Network - Seminar on Management of Common Breastfeeding Problems: What Primary Care Doctors Need to Know and Practice? ★ HKMA Central, Western & Southern Community Network - Certificate Course on Dermatology (Session 4) - Update on Hyperhidrosis 19	★ HKMA Kowloon East Community Network - Update on Type 2 Diabetes Management – Focus on SGLT2 inhibitors ★ MPS Workshop – Mastering Difficult Interactions with Patients Workshop ★ FMSHK Foundation Meeting 20	21	★ HKMA Kowloon East Community Network - Advanced Training Course on Dementia for Primary Care Doctors (Session 4): A. Collaboration of Multi-discipline to Facilitate Diagnostic Process B. Medical and Community Collaboration C. Real Case Sharing by Speake ★ MPS Workshop - Achieving Safer and Reliable Practice 22
★ Current OG Practice 2016 23	24	★ The HKMA Clinic Management System (CMS) Yuan Wang (YW) District Seminar in Kowloon West 25	★ MPS Workshop - Mastering Adverse Outcomes Workshop 26	27	★ The HKMA Clinic Management System (CMS) Yuan Wang (YW) District Seminar in Shatin 28	29
30	31					

Date / Time	Function	Enquiry / Remarks
4 TUE 1:00 PM	**HKMA Yau Tsim Mong Community Network – Conservative Management of Renal Failure due to Diabetic Nephropathy and the Amino Acid Ketoanalogues Revisited** Organiser: HKMA Yau Tsim Mong Community Network; Chairman: Dr. LEUNG Wai Fung, Anders; Speaker: Dr. HO Chung Ping, MH, JP; Venue: Pearl Ballroom, Level 2, Eaton, Hong Kong, 380 Nathan Road, Kowloon	Ms. Candice TONG Tel: 2527 8285 1 CME Point
8:00 PM	**FMSHK Officers' Meeting** Organiser: The Federation of Medical Societies of Hong Kong; Venue: Gallop, 2/F, Hong Kong Jockey Club Club House, Shan Kwong Road, Happy Valley, Hong Kong	Ms. Nancy CHAN Tel: 2527 8898
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 WED 1:00 PM	**HKMA Central, Western & Southern Community Network - Certificate Course on Dermatology (Session 3) - Approach to Atopic Dermatitis** Organiser: HKMA Central, Western & Southern Community Network; Chairman: Dr. POON Man Kay; Speaker: Dr. CHUNG Chun Kin, Alex; Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road Central, Hong Kong	Miss Hana YEUNG Tel: 2527 8285 1 CME Point
6 THU 1:00 PM	**HKMA Kowloon East Community Network - New Treatment for Heart Failure Patients** Organiser: HKMA Kowloon East Community Network; Chairman: Dr. AU Ka Kui, Gary; Speaker: Dr. LEUNG Kwok Fai; Venue: Lei Garden Restaurant (利苑酒家), Shop no. L5-8, apm, Kwun Tong, No. 418 Kwun Tong Road, Kowloon	Miss Hana YEUNG Tel: 2527 8285 1 CME Point
1:00 PM	**HKMA New Territories West Community Network - Ambulatory Blood Pressure Monitoring** Organiser: HKMA-New Territories West Community Network; Chairman: Dr. CHEUNG Kwok Wai, Alvin; Speaker: Dr. CHAN Chun Chung, Ray; Venue: Atrium Function Room, Lobby Floor, Hong Kong Gold Coast Hotel, 1 Castle Peak Road, Gold Coast, Hong Kong	Miss Hana YEUNG Tel: 2527 8285 1 CME Point
1:00 PM	**HKMA Hong Kong East Community Network – Update on Prevention of COPD Exacerbations** Organiser: HKMA Hong Kong East Community Network; Chairman: Dr. CHAN Hoi Chung, Samuel; Speaker: Dr. YUNG Wai Ming, Miranda; 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
7 FRI 1:00 PM	**HKMA Shatin Doctors Network - Rotavirus Infection in Children: Disease Burden and Prevention** Organiser: HKMA Shatin Doctors Network; Chairman: Dr. MAK Wing Kin; Speaker: Dr. CHAN Tak Yan; Venue: Jasmine Room, Level 2, Royal Park Hotel, 8 Pak Hok Ting Street, Shatin, N.T.	Mr. David YIM Tel: 8226 9592 1 CME Point
8 SAT 1:00 PM	**HKMA Kowloon East Community Network - Advanced Training Course on Dementia for Primary Care Doctors (Session 3):** **A. Behavior and Psychological Symptoms of Dementia (BPSD)** **B. Neuro-psychological Assessments** Organiser: HKMA Kowloon East Community Network and Institute of Alzheimer's Education (IAE) of Hong Kong Alzheimer's Disease Association (HKADA); Chairman: Dr. AU Ka Kui, Gary; Speaker: Dr. CHAN Chun Chung, Ray; Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road Central, Hong Kong	Miss Hana YEUNG Tel: 2527 8285 3 CME Points
2:15 PM	**Refresher Course for Health Care Providers 2016/2017** Organiser: Hong Kong Medical Association; HA-Our Lady of Maryknoll Hospital; Speaker: Dr. NG Sin Ngai, Ray; Venue: Training Room II, 1/F, OPD Block, Our Lady of Maryknoll Hospital, 118 Shatin Pass Road, Wong Tai Sin, Kowloon	HKMA CME Dept. Tel: 2527 8452 2 CME Points
(9)	**The 9th Hong Kong Allergy Convention - Novel Strategies for Prevention and Treatment of Allergic Disorders** Organiser: Hong Kong Institute of Allergy; Venue: Hong Kong Convention and Exhibition Centre	HKAC 2016 Secretariat Tel: 2559 9973
12 WED 7:30 AM	**Hong Kong Neurosurgical Society Monthly Academic Meeting – Craniofacial pain syndrome** Organiser: Hong Kong Neurosurgical Society; Speaker: Dr TSE Po Ki, Teresa; hairman: Dr CHAN Kam Tong, Tony; Venue: Seminar Room, G/F, Block A, Queen Elizabeth Hospital	Dr. LEE Wing Yan, Michael Tel: 2595 6456 Fax. No.: 2965 4061 1.5 CME Points
6:30 PM	**MPS Workshop - Mastering Your Risk Workshop** Organiser: The Hong Kong Medical Association; Medical Protection Society; Speaker: Dr. LEE Wai Hung, Danny; Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road Central, Hong Kong	HKMA CME Dept. Tel: 2527 8452 2.5 CME Points
13 THU 1:00 PM	**The HKMA Clinic Management System (CMS) Yuan Wang (YW) District Seminar in Kowloon East** Organiser: The Hong Kong Medical Association I.T. Committee; Chairman: Dr. AU Ka Kui, Gary; Speaker: Mr. Kit IU & Mr. Bernard CHAN; Venue: Lei Garden Restaurant, Shop no. L5-8, APM, Kwun Tong, No. 418 Kwun Tong Road, Kowloon	Ms. Candice TONG Tel: 2527 8285 1 CME Point
2:00 PM	**HKMA Structured CME Programme with HKS&H Session 9: Current Management of Asthma in Adults** Organiser: The Hong Kong Medical Association & Hong Kong Sanatorium & Hospital; Chairman: Dr. YUNG Wai Ming, Miranda; Speaker: Dr. LAM Chung Mei, Jamie; Venue: Function Room A, HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road Central, Hong Kong	HKMA CME Dept. Tel: 2527 8452 1 CME Point
8:00 PM	**FMSHK Executive Committee Meeting** Organiser: The Federation of Medical Societies of Hong Kong; Venue: Council Chamber, 4/F, Duke of Windor Social Service Building, 15 Hennessy Road, Wanchai, Hong Kong	Ms. Nancy CHAN Tel: 2527 8898
15 SAT 1:30 PM	**HKMA KECN, HKCFP & UCH – CME Course for Health Personnel 2016 (Session 4) - Update on Dizziness and Vertigo** Organiser: HKMA Kowloon East Community Network & Hong Kong College of Family Physicians & United Christian Hospital; Chairman: Dr. David CHAO; Speaker: Dr. KWAN Man Yee, Wendy; Venue: 1. Lecture Theatre, G/F, Block K, United Christian Hospital (UCH), 130 Hip Wo Street, Kwun Tong, Kowloon 2. Conference Room, G/F, Block K, UCH (video conference)	Ms. Polly TAI / Ms. Cordy WONG Tel: 3949 3430 (Ms. TAI) / 3949 3087 (Ms. WONG) 1.5 CME Points

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7Days Tasmania

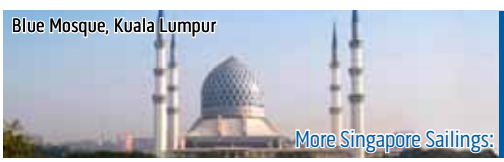
Roundtrip from Sydney
Dawn Princess | Emerald Princess

Sydney, Australia | Hobart (Tasmania), Australia [Overnight] | Port Arthur (Tasmania), Australia | Burnie (Tasmania), Australia | Melbourne, Australia | **Sydney, Australia**

12Dec*2016
29Jan 福 **| 2Jan^2017**

HKD9,079up

*This itinerary will visit Wineglass Bay & Oyster Bay(scenic cruising) and will not stay overnight in Hobart.
^This is an 8 days itinerary, will stay overnight in Melbourne instead of Hobart.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Date / Time	Function	Enquiry / Remarks
15 SAT 1:30 PM	**HKMA New Territories West Community Network - Pearls for the Early Identification of Inflammatory Arthritis** Organiser: HKMA New Territories West Community Network; Chairman: Dr. CHUNG Siu Kwan, Ivan; Speaker: Dr. LEE Ka Wing, Gavin & Dr. YIP Man Lung, Ronald; Venue: Plentiful Delight Banquet (元朗喜尚嘉喜酒家), 1/F, Ho Shun Tai Building, 10 Sai Ching Street, Yuen Long, N.T.	Miss Hana YEUNG Tel: 2527 8285 1.5 CME Points
2:30 PM	**MPS Workshop - Mastering Adverse Outcomes Workshop - 2 hours** Organiser: The Hong Kong Medical Association & Medical Protection Society; Speaker: Dr. CHENG Ngai Shing, Justin; Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road, Central, Hong Kong	HKMA CME Dept. Tel: 2527 8452 2 CME Points
16 SUN 1:00 PM	**HKMA Bridge Tournament 2016 (IMP Pairs)** Organiser: The Hong Kong Medical Association; Venue: Mariner's Club, 11 Middle Road, Hong Kong	Miss Denise KWOK Tel: 2527 8285
18 TUE 1:00 PM	**HKMA Kowloon West Community Network - Update on the Management of Chronic Hepatitis B** Organiser: HKMA Kowloon West Community Network; Chairman: Dr. CHAN Ching Pong; Speaker: Dr. FUNG Tang Tat, Konrad; Venue: Crystal Room IV-V, 3/F, Panda Hotel, 3 Tsuen Wah Street, Tsuen Wan, NT	Miss Hana YEUNG Tel: 2527 8285 1 CME Point
19 WED 1:00 PM	**HKMA Kowloon City Community Network - Management of DM and Hyperlipidemia in Chronic Kidney Disease Patients** Organiser: HKMA Kowloon City Community Network; Chairman: Dr. CHIN Chu Wah; Speaker: Dr. MA King Wing; Venue: Sportful Garden Restaurant, 2/F, Site 6, Whampoa Garden, Wonderful Worlds of Whampoa, 8 Shung King Street, Hung Hom	Ms. Candice TONG Tel: 2527 8285 1 CME Point
1:00 PM	**HKMA Shatin Doctors Network - Seminar on Management of Common Breastfeeding Problems: What Primary Care Doctors Need to Know and Practice?** Organiser: HKMA Shatin Doctors Network and Primary Care Office of the Department of Health; Chairman: Dr. MAK Wing Kin; Speaker: Dr. FOK Oi Ling, Annie; Venue: Jasmine Room, Level 2, Royal Park Hotel, 8 Pak Hok Ting Street, Shatin, N.T	Ms. Candice TONG Tel: 2527 8285 1 CME Point
1:00 PM	**HKMA Central, Western & Southern Community Network - Certificate Course on Dermatology (Session 4) - Update on Hyperhidrosis** Organiser: HKMA Central, Western & Southern Community Network; Chairman: Dr. LAW Yim Kwai; Speaker: Dr. CHAN Hau Ngai, Kingsley; Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road, Central, Hong Kong	Miss Hana YEUNG Tel: 2527 8285 1 CME Point
20 THU 1:00 PM	**HKMA Kowloon East Community Network - Update on Type 2 Diabetes Management – Focus on SGLT2 inhibitors** Organiser: HKMA Kowloon East Community Network; Chairman: Dr. MA Ping Kwan, Danny; Speaker: Dr. LAU Wing Yan, Winnie; Venue: V Cuisine, 6/F, Holiday Inn Express Hong Kong Kowloon East, 3 Tong Tak Street, Tseung Kwan O, Kowloon	Miss Hana YEUNG Tel: 2527 8285 1 CME Point
6:30 PM	**MPS Workshop – Mastering Difficult Interactions with Patients Workshop** Organiser: The Hong Kong Medical Association & Medical Protection Society; Speaker: Dr. FUNG Shu Yan, Anthony; Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road, Central, Hong Kong	HKMA CME Dept. Tel: 2527 8452 2.5 CME Points
8:00 PM	**FMSHK Foundation Meeting** Organiser: The Hong Kong Medical Association & Medical Protection Society; Speaker: Dr. FUNG Shu Yan, Anthony; Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road, Central, Hong Kong	Ms. Nancy CHAN Tel: 2527 8898
22 SAT 1:00 PM	**HKMA Kowloon East Community Network - Advanced Training Course on Dementia for Primary Care Doctors (Session 4):** **A. Collaboration of Multi-discipline to Facilitate Diagnostic Process** **B. Medical and Community Collaboration** **C. Real Case Sharing by Speake** Organiser: HKMA Kowloon East Community Network and Institute of Alzheimer's Education (IAE) of Hong Kong Alzheimer's Disease Association (HKADA); Chairman: Dr. MA Ping Kwan, Danny; Speaker: Dr. CHAN Chun Chung, Ray; Venue: HKMA Dr. Li Shu Pui Professional Education Centre, 2/F, Chinese Club Building, 21-22 Connaught Road, Central, Hong Kong	Miss Hana YEUNG Tel: 2527 8285 3 CME Points
2:30 PM	**MPS Workshop - Achieving Safer and Reliable Practice** Organiser: The Hong Kong Medical Association & Medical Protection Society; Speaker: Dr. CHENG Ngai Shing, Justin; Venue: HKMA Wanchai Premises, 5/F, Duke of Windsor Social Service Building, 15 Hennessy Road, Hong Kong	HKMA CME Dept. Tel: 2527 8452 2.5 CME Points
23 SUN 8:30 AM - 4:00 PM	**Current OG Practice 2016** Organisers: Hong Kong Sanatorium & Hospital Venue: Ballroom, JW Marriott Hotel Hong Kong, Pacific Place, 88 Queensway, Admiralty	Tel: 2835 3426 ogsymposium2016@hksh.com www.hksh.com/og-registration
25 TUE 1:00 PM	**The HKMA Clinic Management System (CMS) Yuan Wang (YW) District Seminar in Kowloon West** Organiser: The Hong Kong Medical Association I.T. Committee; Chairman: Dr. TONG Kai Sing; Speaker: Mr. Kit IU & Mr. Bernard CHAN; Venue: Crystal Room IV, 3/F, Panda Hotel, 3 Tsuen Wah Street, Tsuen Wan, N.T.	Ms. Candice TONG Tel: 2527 8285 1 CME Point
26 WED 6:30 PM	**MPS Workshop - Mastering Adverse Outcomes Workshop** Organiser: The Hong Kong Medical Association & Medical Protection Society; Speaker: Dr. HUNG Chi Wan, Emily; Venue: Eaton Hotel, 380 Nathan Road, Yau Ma Tei, Kowloon	HKMA CME Dept. Tel: 2527 8452 2.5 CME Points
28 FRI 1:00 PM	**The HKMA Clinic Management System (CMS) Yuan Wang (YW) District Seminar in Shatin** Organiser: The Hong Kong Medical Association I.T. Committee; Chairman: Dr. MAK Wing Kin; Speaker: Mr. Kit IU & Mr. Bernard CHAN; Venue: Jasmine Room II, 2/F, Royal Park Hotel, 8 Pak Hok Ting Street, Shatin, N.T.	Ms. Candice TONG Tel: 2527 8285 1 CME Point

Upcoming Meeting

12-13/11/2016 8:30am-10:00pm	**24th Annual Scientific Meeting of Hong Kong College of Radiologists** Organiser: Hong Kong College of Radiologists; Venue: Hong Kong Academy of Medicine Jockey Club Building, 99 Wong Chuk Hang Road, Aberdeen, HKSAR, China	Tel: 2871 8787 Fax: 2871 8898 Email: hkcr@hkam.org.hk

1. **Fast action** on symptoms[2]
   - Rapidly stops bleeding
   - Reduces pain and restores women's quality of life
2. **Significant and sustainable** reduction **of fibroids size**[3]
   - Maintained 6 months after treatment cessation
3. **Good safety** profile
4. **A first-in-class** Selective Progesterone Receptor Modulator (SPRM)
   - Direct and tissue specific effect on uterine fibroid cells[1]
5. **Convenient, oral, once-a-day treatment**
   - For up to 6 months

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Ulipristal acetate

Esmya 5 mg Tablets – Hong Kong Abbreviated Prescribing Information
Indications: Pre-operative treatment of moderate to severe symptoms of uterine fibroids in adult women of reproductive age.
Dosage: Adults: 1 oral tab daily, started in first week of menstrual cycle for up to 3 months. If required, repeat 3-month treatment course once, starting at the earliest during second menstruation after completing initial course.
Contraindications: Hypersensitivity to active substance or excipients. Genital bleeding of unknown aetiology or not caused by uterine fibroids. Uterine, cervical, ovarian or breast cancer. Pregnancy (to be excluded before starting). Lactation.
Precautions: Non hormonal contraception recommended. Not recommended for patients with severe renal or moderate to severe hepatic impairment. Not recommended for women with severe asthma insufficiently controlled by oral glucocorticoids. Changes in the histology of the endometrium may be observed with Esmya. Warn that reduction in menstrual blood loss or amenorrhoea likely within 10 days and advise to inform doctor if excessive bleeding persists.
Interactions: Progestogens, CYP3A4 inducers and inhibitors, P-gp substrates (e.g. digoxin, dabigatran, fexofenadine).
Side effects: Amenorrhea, endometrial thickening, headache, vertigo, abdominal pain, nausea, acne, hyperhidrosis, musculoskeletal pain, uterine haemorrhage, hot flushes, pelvic pain, ovarian cyst, breast tenderness/pain, oedema, fatigue, raised cholesterol.

References:
1. Yoshida S. Cell-type specific actions of progesterone receptor modulators in the regulation of uterine leiomyoma growth. Semin Reprod Med 2010. 28(3):260-73.
2. Donnez J. and al. Ulipristal Acetate versus Placebo for Uterine Fibroids. N Engl J Med 2012;366:409-20.
3. Donnez J. and al. Ulipristal Acetate versus Leurprolide Acetate for Uterine Fibroids. N Engl J Med 2012;366:421-32.

Full Prescription Information Available Upon Request.

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Zung Fu Test Drive Day

The Federation was invited by Zung Fu to test drive its new models on Sunday, 15 May 2016. Our members drove from the Causeway Bay showroom to the Lantau Link Visitors Centre, and then returned to the Mercedes Me Store at Central for a fusion style afternoon tea. This was a special treat for car enthusiasts and Sunday drivers alike. The Federation hopes to organise a variety of social activities to suit members' interests. Your ideas and suggestions are most welcome.

Certificate Course for doctors, nurses and health care providers • Course No. C292 • CME / CNE Course

Certificate Course on

Introduction to Otorhinolaryngology, Head & Neck Surgery (ENT)

Jointly organised by

The Federation of Medical Societies of Hong Kong

Hong Kong Society of Otorhinolaryngology, Head & Neck Surgery

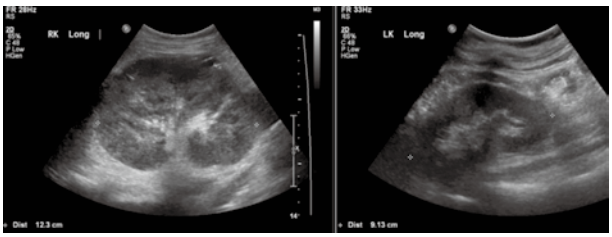
Date	Topics	Speakers
24 Nov	Diagnostic Approaches to Common Head & Neck Mass	Dr. CHUNG Chun Kit, Joseph Associate Consultant Department of Ear, Nose & Throat Queen Mary Hospital
1 Dec	Update on Current Management of Allergic Rhinitis, Sinusitis and Epistaxis	Dr. LEE Lip Yen, Dennis Specialist in Otorhinolaryngology Private Practice
8 Dec	Hearing Loss and Hearing Rehabilitation	Dr. CHANG Wai Tsz Specialist in Otorhinolaryngology Department of Ear, Nose & Throat Prince of Wales Hospital
15 Dec	Evaluation and Management of Hoarseness	Dr. KWAN Ka Chung, Peter Specialist in Otorhinolaryngology Department of Ear, Nose & Throat Pamela Youde Nethersole Eastern Hospital
22 Dec	Facial Plastic Surgery in ENT (i) Management of Fracture Nasal Bone (ii) Update on Facial Nerve Palsy	Dr. Winnie KAN Specialist in Otorhinolaryngology Department of Ear, Nose & Throat Queen Mary Hospital
29 Dec	Common Paediatric ENT Conditions	Dr. WONG Yee Hang, Birgitta Consultant Department of Ear, Nose & Throat Queen Mary Hospital

Date : 24 November 2016 - 29 December 2016 (Every Thursday)
Time : 7:00 pm – 8:30 pm
Venue : Lecture Hall, 4/F., Duke of Windsor Social Service Building,15 Hennessy Road, Wanchai, Hong Kong
Language Media : Cantonese (Supplemented with English)
Course Fee : HK$750 (6 sessions)
Certificate : Awarded to participants with a minimum attendance of 70%
Enquiry : The Secretariat of The Federation of Medical Societies of Hong Kong
Tel.: 2527 8898 Fax: 2865 0345 Email: info@fmshk.org

Answers to Radiology Quiz

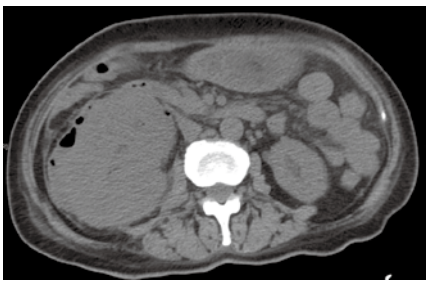
Answer:

1. Two images of the right kidney were given. On supine view, the right kidney was swollen (Please compare with the normal left kidney shown below). Tiny "dirty" echogenic foci with reverberation/ring-down artifacts were noted at the periphery of the right kidney. When the patient turned towards the left side, these tiny echogenicities coalesced together, creating a band over the kidney. Since these echogenicities showed movements during positioning of the patient, we were able to confidently diagnose them as gas bubbles.



2. Emphysematous pyelonephritis. Without the decubitus view, the tiny echogenic foci may be mistaken for calcification.

3. Non-enhanced computed tomography would show ectopic gas densities and swelling (shown below). Contrast enhanced computed tomography of the abdomen and pelvis would delineate gas from calcification and also help exclude any complications such as abscesses.



Reference:
Craig WD, Wagner BJ, Travis MD. Pyelonephritis: radiologic-pathologic review. Radiograhics 2008;28:255-77.

Dr Christine LO
Department of Radiology, Queen Mary Hospital

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Reduces the risk of allergic sensitization with Double Effect[1,2]

DOUBLE EFFECT

Partially hydrolysed formula

- Recommended for primary allergy prevention[3]
- Hypoallergenic
- Immunomodulatory properties[4,5]
- Whey protein base

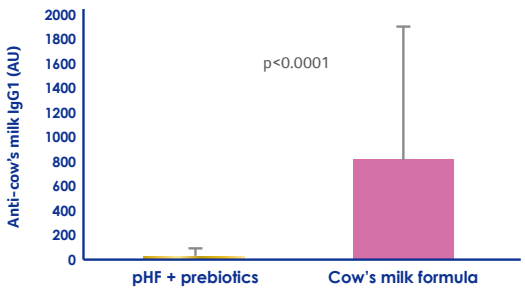
Prebiotics scGOS:lcFOS 9:1

- Mimic the molecular structure, function and distribution of human milk oligosaccharides[6]
- Most well-studied prebiotics with the most documented clinical benefits*
- Encourage a healthy gut microbiota[7]

*There are 30 clinical studies in over 55 scientific publications to evaluate the benefits of scGOS: lcFOS 9:1. Clinical benefits include reducing the risk of allergic manifestations,[8] and atopic dermatitis[8]; and protecting babies against infections.[9]

Clinically proven benefits

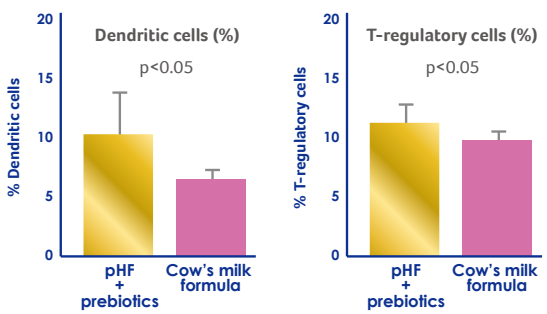
1 Reduces the risk of allergic sensitization[1]



Nutritional intervention with specific prebiotics mixture including scGOS/lcFOS suppresses allergic sensitization

pHF, partially hydrolysed formula; Ig, immunoglobulin

2 Contributes to oral tolerance of cow's milk protein[1]



Oral tolerance indicated by the presence of a regulatory immune respone, demonstrated by increased dendritic and T-regulatory cells[1]

pHF, partially hydrolysed formula

Infants at an increased risk of allergic disease were randomly assigned to receive partially hydrolysed formula supplemented with a specific mixture of oligosaccharide prebiotics or standard cow's milk formula for the first 6 months of life if parents decided to stop or supplement breastfeeding in the first 18 weeks (n=1,047); samples were obtained from infants at the age of 6 months.

The ONLY Complete Allergy Solution Range with prebiotics from prevention to management‡

Allergy prevention

Allergy management

One-Step-Ahead Science with NUTRICIA's 40 years of research in natural nutrition

‡Among the major partially and extensively hydrolysed formula brands in Hong Kong.

For healthcare professionals only

Important Notice:
Breastfeeding is best for babies and provides the best start in life. It is important that, in preparation for and during breastfeeding, pregnant women eat a healthy, balanced diet. Combined breast and bottle feeding in the first weeks of life may reduce the supply of mothers' own breast milk, and reversing the decision not to breastfeed is difficult. The social and financial implications of using infant formula should be considered. Improper use of an infant milk or inappropriate foods or feeding methods may present a health hazard. If mothers use infant formula, they should follow the manufacturer's instructions for use carefully – failure to follow the instructions may make their babies ill. It is recommended for mothers to consult doctors, midwives or health visitors for advice about feeding their babies.

References: 1. Tang M, et al. Hypo-antigenic and immune modulatory properties of a partially hydrolysed cow's milk formula supplemented with prebiotic oligosaccharides. Presented at: European Academy of Allergy and Clinical Immunology 2014; 7-11 March 2014; Copenhagen, Denmark. Abstract number 1929. **2.** van Esch BC, et al. 2014, Submitted. **3.** Muraro A, et al. *Allergy* 2014;69:560–601. **4.** van Esch BC, et al. *Toxicol Lett* 2011;201:264–269. **5.** van Esch BC, et al. *Toxicol Lett* 2013;220:95–102. **6.** Boehm G, et al. *Arch Dis Child Fetal Neonatal Ed* 2002;86:F178–F181. **7.** Haarman M and Knol J. *Appl Environ Microbiol* 2005;71:2318–2324. **8.** Arslanoglu S, et al. *J Nutr* 2008;138(6):1091-1095. **9.** Arslanoglu S, et al. *J Nutr* 2007;137:2420-2424.

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YOUR RELIABLE 1ST LINE PHARMACOLOGICAL OPTIONS FOR LUTS+ MANAGEMENT[3,4]

*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.**

BETMIGA® Abridged Prescribing Information **I:** Symptomatic treatment of urgency, increased micturition frequency &/or urgency incontinence as may occur in adults w/ overactive bladder (OAB) syndrome. **D:** Adult including elderly 50 mg once daily. **A:** Swallow whole. Do not chew/divide/crush. **C:** Hypersensitivity. Severe uncontrolled hypertension. **AR:** Common: Urinary tract infection, tachycardia, nausea. **Full prescribing information is available upon request.**

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