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Message from the Editor in Chief

Dear authors, reviewers and readers.

It has been a long-awaited need to commence a scientific publication dedicated to the field of post reproductive health in Sri Lanka. Therefore, I consider it a great pleasure and a privilege to take the initiative in publishing the first issue of the Sri Lanka Journal of Menopause.

Our main ambition is to provide a medium to both senior, renowned clinicians as well as young enthusiasts to share their researches and studies on this evolving field of menopause which has recently been of great interest among the local scientific community.

I am pleased to have received many reviews and articles for this 1st issue of volume 1 of Sri Lanka Journal of Menopause. I assume it reflects the timely necessity of such publication in the country and the willingness of gynaecologists to contribute to such needs.

We intend to continue with this publication bi annually with high quality scientific papers, reviews and researches to improve the awareness of our readers in the field of menopause.

I would like to invite our colleagues interested in the areas of post reproductive health to join us in the future to make this journal a success. I take this opportunity to thank our authors and reviewers to make this publication a success. Finally My sincere thanks goes to Assistant Editors Dr.C. Ekanayake and Dr.SharadaJayalath for their hard work done to make this journal a success.

Dr. Sanath Lanerolle.

Leading Article

Menopausal Hormone Therapy with Oestrogen and Progestogen

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Preamble

Since the introduction of oestrogen therapy / oestrogen and progestogen therapy (ET/EPT), there has been a general consensus that vasomotor symptoms are relieved by ET/EPT. Following WHI and Million Women studies, which indicated significant adverse effects of ET/EPT including (Deep Vein Thrombosis) DVT, Stroke, (Ischemic Heart Disease) IHD and breast carcinoma, there was an overall decline in hormone therapy use.

However, the review of the WHI results indicated systemic progesterone therapy was associated with breast cancer and that estrogens were beneficial. National and international menopause organisations advocated that reports of harm attributed to ET/EPT were exaggerated. Secondly an overall net benefit of ET/EPT, particularly on the vascular health, was seen in women who initiated treatment during the menopause transition or early postmenopause rather than late postmenopause. This approach was often referred to as the "timing hypothesis" (i.e. a critical window for favourable outcomes of hormone therapy treatment). In addition to these, oestrogen only preparations were thought to be 'breast protective' and transdermal preparations were thought to have less systemic side effects. Notwithstanding this, a recent Lancet article showed an elevated breast cancer risk following ET/EPT. This called for a review of the generalisability of the above-mentioned consensus on ET/EPT by the international and national organisations. Therefore, Menopause Society of Sri Lanka thought it is prudent to revise its position statement on oestrogen and progestogen ET/EPT.

Introduction

Menopause is defined as the final menstrual period (North American Menopause Society, 2017). The average age at menopause is approxi mately 51 years, with a normal range of 45–55 years. Women who had their final period between the ages of 40 and 45 years are regarded as having early menopause and those less than 40 years as premature menopause, or premature ovarian insufficiency. Prior to the final period, women have a phase of fluctuating ovarian function and hormone levels known as peri - menopause, which typically lasts several years.

Menopause results in a number of physiological changes affecting the cardiovas cular, musculoskeletal, urogenital and central nervous systems. There is an increase in incidence of cardiovascular disease and osteoporosis after menopause.

Menopausal hormone therapy (ET/EPT)

ET/EPT should be part of an overall strategy including lifestyle recommendations regarding diet, exercise, smoking cessation and safe levels

of alcohol consumption for maintaining the health of peri and post menopausal women.

ET/EPT is replacement of estrogen when ovarian endocrine function fails, either at the time of natural menopause or due to premature menopause due to a variety of causes.

Estrogen supplementation has to be coupled with either oral progestogen or levonorgestrel intra uterine system for endometrial protection for women who have not had a hysterectomy.

Previous evidence base for ET/EPT

Benefits are more likely to outweigh risks for symptomatic women before the age of 60 years or within 10 years after menopause. There are no arbitrary limits regarding the duration of use. In the absence of contraindications it can be used for as long as benefits out weight he risks on an individual basis (Neves-e-castro et al., 2015). Duration of treatment with ET/EPT should be determined on an individual basis with no mandatory limit in the absence of obvious contraindications (Baber et al., 2016).

The 2016 Revised Global Consensus Statement on Menopausal Hormone Therapy endorsed by several international bodies, states that in women under 60-years or who are within 10-years of menopause with no contraindications, the risk-benefit ratio is most favourable for treatment of bothersome vasomotor symptoms and for those at elevated risk for osteoporosis or fracture (*Villiers et al., 2016*).

The 2017 hormone therapy position statement of The North American Menopause Society reiterated that, for women who start ET/EPT after 10-years from menopause or are aged 60 years or more, the risk-benefit ratio appeared less favourable because of higher risks of coronary heart disease, stroke, venous thromboem bolism, and dementia. It added further that longer durations of therapy should be for documented indications such as persistent vasomotor symptoms or osteoporosis. For bothersome vulvovaginal symptoms that are not relieved with over-the counter therapies and without indications for use of systemic ET/EPT, low-dose vaginal estrogen therapy or other therapies were recommended (*North American Menopause Society, 2017*).
Until now evidence on breast cancer risk and menopausal hormone therapy (ET/EPT) were inconsistent, with little evidence on long-term effects (*Panay et al., 2013; Neves-e-castro et al., 2015; National Institute for Health and Care Excellence, 2018; Green J, Reeves G, Floud S, 2019*).

NICE stated that ET/EPT with oestrogen and progestogen can be associated with an increased risk of breast cancer, which is "related to treatment duration and reduces after stopping." It did not provide any advice on how long ET/EPT should be used (National Institute for Health and Care Excellence, 2018). The risk of breast cancer is primarily associated with combined oestrogen/ progestogen therapy and related to the duration of use. The risk of breast cancer attributable to combined ET/EPT is small and decreases after treatment is stopped. Oestrogen alone has not been shown to increase breast cancer risk in high quality randomized controlled trials (Panay et al., 2013).

More recently, KEEPS study also supported the value and safety of the use of ET/EPT in recently menopaused women. Researchers concluded that estrogen/progesterone treatment started soon after menopause appeared to be safe; relieved many of the symptoms of menopause; and improved mood, bone density, and several markers of cardiovascular risk. They concluded that these findings provide an outlook for future research to optimize ET/EPT and improve the health of postmenopausal women (Miller et al., 2019).

New evidence on breast cancer in ET/EPT users

A recent meta-analysis in Lancet on the "Type and timing of menopausal hormone therapy and breast cancer risk" has serious implications for the use of ET/EPT (Collaborative Group on

Hormonal Factors in Breast Cancer, 2019). The relevance of the main findings in this study lies in the implication for the absolute risks during and after ET/EPT use for women who start it between 40–59 years.

For a given preparation, the relative risks during years 5–14 of current use were much greater for oestrogen-receptor-positive tumours than for oestrogen-receptor-negative tumours, and were similar for women starting ET/EPT at ages 40–44, 45–49, 50–54, and 55–59 years, irrespective of age category. What was interesting was that the excess risk persisted for more than 10 years even after stopping with its magnitude depending on the duration of use. However, there was only little excess when used for less than 1 year.

The excess risk was more for current users, but some risk persisted for more than a decade after stopping ET/EPT. About half the excess would be during the first 5 years of use, and the rest would be during the next 15 years of past use. Risks also did not differ substantially between the main oestrogenic constituents, or by route whether oral or transdermal. There appeared to be little risk from topical vaginal oestrogen preparations.

The absolute risk was one in every 50 users for oestrogen-plus-daily-progestogen ET/EPT, one in 70 users for oestrogen plus - intermittent - pro gestagen ET/EPT, one in 200 users for oestrogen- only ET/EPT. The risks were not related to the progestagenic constituents and were lower for dydrogesterone.

Initial evaluation prior to ET/EPT and follow-up

Before consideration of any therapeutic regimen, including oestrogen therapy / oestrogen progestogen therapy (ET/EPT), all women should have a complete health evaluation, including a comprehensive history and physical examination. Mammography should be performed according to national guidelines and age, but preferably within the previous 12 months before initiation of therapy. Other specific examinations, such as bone densitometry, should be considered on a case - by-case basis.

New recommendation

In addition to the above, screening for BRCA gene mutation would be of benefit for pre-treatment risk stratification in all users in spite of a negative hereditary breast and ovarian cancer syndrome. If the duration of treatment of oestrogen exceeds 1-year, it has to be under specific individualized indications with intense follow-up and monitoring.

Contraindications to oral ET/EPT & relative contraindications to transdermal ET/EPT

- Established cardiovascular disease
- Venous thromboembolic disease
- Active liver disease
- Migraine with aura
- Well controlled hypertension is not a contraindication.

Progestogen component of ET/EPT

The primary menopause-related indication for progestogen use is endometrial protection from unopposed ET which significantly increases the risk of endometrial cancer. Progestogen is generally not indicated when low-dose estrogen is administered vaginally for Genito-Urinary Syndrome (GSM). Recent evidence shows that users of LNG-IUS had a strongly reduced risk of ovarian and endometrial cancer with no increased risk of breast cancer (Jareid et al., 2018).

Routes of ET/EPT therapy

The transdermal (gels or patches) and the subcutaneous (implants) routes of estrogen administration avoid the first pass metabolism through the liver and are not associated with an increased risk of venous thrombosis (Panay et al., 2013).

New evidence

There has been no new evidence against this recommendation. In addition, contrary to the existing belief, breast cancer risk with transdermal route is comparable to oral ET/EPT (Collaborative Group on Hormonal Factors in Breast Cancer, 2019). Recent evidence shows that there is no excess risk of breast cancer with vaginal oestrogens.

(Collaborative Group on Hormonal Factors in Breast Cancer, 2019).

ET/EPT in the management of menopause related issues

Vasomotor symptoms (VMS)

Treatment of moderate to severe vasomotor symptoms (i.e., hot flashes and night sweats) remains the primary indication for systemic ET and EPT (ACOG, 2014; Neves-e-castro et al., 2015; NAMS, 2017; RANZCOG, 2017).

2019 new recommendation

There has been no new evidence against this recommendation. Whilst ET/EPT, both systemic and transdermal remains the mainstay in the treatment of VMS, the duration and the dosage has to be the minimum required. If the duration of treatment of oestrogen exceeds 1-year, it has to be under specific individualized indications with intense follow-up and monitoring.

Genito-Urinary Syndrome (GSM)

Almost all systemic and vaginal ET/EPTs are approved for treating moderate to severe symptoms of vulvar and vaginal atrophy, such as vaginal dryness, dyspareunia, atrophic vaginitis, soreness, recurrent vaginitis and urogenital symptoms such as cystitis, post coital cystitis, nocturia, urinary frequency and urgency (Panay et al., 2013; ACOG, 2014; Villiers et al., 2016). In addition ET/EPT, systemic or local, is likely to improve sexual function in women with dyspareunia secondary to vaginal atrophy (Panay et al., 2013).

The choice of therapy should be guided by clinical experience and patient preference. Progestogen is generally not indicated when low-dose estrogen is administered locally for vaginal atrophy. A systematic review in 2019 supports the use of low-dose vaginal estrogens for treating vulvar and vaginal atrophy in menopausal women without a concomitant progestogen (Constantine et al., 2019). This review did not report an increased endometrial hyperplasia or cancer risk with low-dose, unopposed vaginal estrogens.

For women treated for non-hormone-dependent cancer, management of vaginal atrophy is similar to that for women without a cancer history. For women with a history of hormone-dependent cancer, management recommendations are dependent upon each woman`s preference in consultation with her oncologist.

New recommendation

There has been no new evidence against this recommendation. When ET/EPT is considered solely for this indication, local vaginal ET is generally recommended (ACOG, 2014) (Villiers et al., 2016). Recent evidence shows that there is no excess risk of breast cancer with vaginal oestrogens (Collaborative Group on Hormonal-Factors in Breast Cancer, 2019). Vaginal ET can be continued for women as long as distressful symptoms remain (Constantine et al., 2019).

Sexual function

ET/EPT, systemic or topical, may improve sexual function in women with dyspareunia secondary to vaginal atrophy (Panay et al., 2013). The administration of systemic testosterone has been shown to result in significant improvement in sexual function, including sexual desire, and orgasm (Panay et al., 2013). Androgen replacement therapy will be discussed in a separate guidance.

New recommendation

There has been no new evidence against this recommendation. Recent evidence shows that there is no excess risk of breast cancer with local oestrogens (Collaborative Group on Hormonal Factors in Breast Cancer, 2019). Vaginal ET can be continued for women as long as distressful symptoms remain (Constantine et al., 2019).

Bone health

There is strong evidence of the efficacy of ET/EPT in reducing the risk of postmenopausal osteoporotic fracture. For women who require drug therapy for osteoporosis risk reduction (including women at high risk of fracture during the next 5-10 y), ET/EPT can be considered as an option.

New recommendation

There has been no new evidence against this recommendation. However, if a woman at risk of osteoporosis is prescribed ET/EPT, it must be based on an individual case by case approach with increased surveillance if continued beyond one year.

Premature menopause and premature ovarian failure

A spontaneous or iatrogenic menopause before the age of 45 years and particularly before 40 years places a woman at a higher risk for cardiovascular disease and osteoporosis in addition to affective disorders and dementia as well. In such women, ET/EPT reduces symptoms and preserves bone density (Villiers et al., 2016).The current recommendation was for women who have an early or premature menopause, ET/EPT was recommended until at least 51 years of age unless there are contraindications (Panay et al., 2013; Magraith, Karen, Stuckey, 2019). Thereafter, a shared decision about whether to continue ET/EPT should be made in the same way as it would be for other women of this age (Magraith and Stuckey, 2019). The mode of delivery and the dose may be adjusted over time.

New recommendation

There has been no new evidence against this recommendation. As the duration of treatment of oestrogen exceeds 1-year, it has to be under specific individualized intense follow-up and monitoring.

Effects of ET/EPT on other health issues

Coronary heart disease

RCTs and observational data as well as meta-analyses provide evidence that standard-dose estrogen-alone ET/EPT may decrease the risk of myocardial infarction and all-cause mortality when initiated in women younger than 60 years of age and/or within 10 years of menopause (Villiers et al., 2016). This view was further endorsed by the KEEPS study (Miller et al., 2019).

New recommendation

There has been no new evidence against this information. However, ET/EPT is not indicated as primary or secondary prevention of coronary vascular disease in view of recent evidence on elevated breast cancer risk in women on long-term ET/EPT.

Diabetes mellitus

Large RCTs 17 suggest that ET/EPT reduces new onset of diabetes mellitus. There is inadequate evidence to recommend combined EPT for a sole indication of the prevention of DM in perimenopausal women.

New recommendation

There has been no new evidence against the above information.

Depression, dementia and cognitive decline

HRT should not be initiated for the sole purpose of improving cognitive function or reducing the risk of dementia in postmenopausal women (Panay et al., 2013). It is unknown whether ET has a direct

benefit or harm for treatment of dementia due to Alzheimer`s disease. The KEEPS continuation study results would help to answer this issue. Evidence is insufficient to support the use of ET/EPT for the treatment of depression in general.

New recommendation

There has been no new evidence against the above information.

Complications of ET/EPT

Breast cancer

This was discussed under the section "New evidence on breast cancer in ET/EPT users"

Venous thromboembolism

Oral ET/EPT increased the risk of VTE two- to four-fold, with the highest risk in the first year of use. The risk of VTE was increased by smoking, age, obesity and oral ET/EPT (Panay et al., 2013). The use of transdermal ET/EPT has not been associated with increased VTE risk (Olié et al., 2011). Observational studies and a meta-analysis show a lower risk of VTE with transdermal therapy (0.05mg twice weekly or lower) compared to oral therapy (Villiers et al., 2016). Transdermal treatment was the safest type of hormone replacement therapy when risk of venous thromboembolism was assessed (Mohammed et al., 2015).

New recommendation

There is no new evidence to warrant a change in practice.

Stroke

The WHI study revealed an overall increased incidence of stoke in women using estrogen and progestogen therapy or estrogen alone (Panay et al., 2013). A smaller increase in the incidence of stroke was seen in women who commenced HRT between the ages of 50 and 59 (Panay et al., 2013). Both ET and EPT appear to increase the risk of ischemic stroke in postmenopausal women (Villiers et al., 2016). Women with prevalent cardiovascular disease (CVD) have a high baseline risk of stroke. It is advisable that ET/EPT should be particularly avoided for women who have an elevated baseline risk of stroke.

New recommendation

There is no new evidence to warrant a change in practice.

Endometrial cancer

Unopposed oestrogen replacement therapy increases endometrial cancer risk. Most studies have shown that this excess risk is not completely eliminated with monthly sequential progestogen addition, especially when continued for more than 5 years. This has also been found with long cycle HRT. No increased risk of endometrial cancer has been found with continuous combined regimens.

New recommendation

Local vaginal oestrogen preparations were not shown to increase endometrial cancer, and as such progestogen supplementation is not required (Collaborative Group on Hormonal Factors in Breast Cancer, 2019).

Ovarian cancer

Most data are related to the replacement with oestrogen alone with increasing risk in long term therapy (>10 years). However with continuous combined therapy, this increase does not seem apparent. This issue is unresolved and requires further examination and there is currently insufficient evidence to recommend alterations in ET/EPT prescribing practice.

New recommendation

There is no new evidence to warrant a change in practice.

Colorectal cancer

Results from the oestrogen progestogen arm, but not the oestrogen alone arm, of the WHI study were consistent with data from case control and cohort studies that indicate that ET/EPT reduces the risk of colorectal cancer by about a third (Women's Health Initiative, 2002). However little is known about colorectal cancer risk when treatment is stopped. There is no information about ET/EPT in high risk populations and current data do not allow prevention as a recommendation.

New recommendation

There is no new evidence to warrant a change in practice.

Gallbladder disease

WHI confirmed the observation of the Heart and Estrogen/progestin Replacement Study published in 1998 that HRT increases the risk of gallbladder disease. Gallbladder disease increases with ageing and with obesity, and as confounder HRT users may have silent pre-existing disease.

New recommendation

There is no new evidence to warrant a change in practice.

Conclusion

It is well accepted that ET/EPT offers benefits for menopausal symptoms. However, except for vaginal estrogen, ET/EPT use beyond one year seems to confer a steadily increasing risk of breast cancer related to the duration of use. Therefore the lowest effective dose should be used for the shortest time. Extended treatment beyond 1 year has to be individualized and should be under strict surveillance.

Future research

Despite short-term benefits of ET/EPT from the KEEPS study, the Lancet evidence necessitates a closer review of ET/EPT use and recalculation of all-cause mortality figures. Furthermore in view of the recent damning evidence there needs to be a revisit on the implications of current ET/EPT use in premature menopause in relation to breast cancer and also of the possibility of breast cancer following blanket administration of combined oral contraceptive pills and long-acting reversible contraception (LARC) for women of reproductive age.

The following guidance was considered in the preparation of this text.

- 2013 British Menopause Society & Women's Health Concern recommendations on hormone replacement therapy
- 2014 Practice Bulletin of the American College of Obstetricians and Gynecologists
- 2014 Statement on Management of the menopause by the Royal Australian and New Zealand College of Obstetricians & Gynaecologists
- 2015 European Menopause and Andropause Society Position statement
- 2015 Endocrine Society Clinical Practice Guideline on Treatment of Symptoms of the Menopause
- 2016 International Menopause Society Recommendations on women's midlife health and menopause hormone therapy
- 2016 Revised Global Consensus Statement on Menopausal Hormone Therapy
- 2017 hormone therapy position statement of The North American Menopause Society
- 2018 Australasian Menopause Society Information sheet on Combined Menopausal Therapy
- 2019 Menopause Guidelines of Royal Australian College of General Practitioners.

Adopted from Position statement of Sri Lanka menopause society of Sri Lanka 2009

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Review

Intimate Partner Violence (IPV) among the older women: too many secrets

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Background

Intimate Partner Violence [IPV], often known as Domestic Violence (DV), is abuse that occurs in the context of an intimate relationship. An intimate partner is a person with whom one has a close personal relationship that can be characterized by a romantic and emotional connection and regular contact with ongoing physical contact and sexual behavior often identified as a couple, which may or may not be sanctified through marriage. IPV includes abuse by a current or former spouse, person living together, boyfriend, or girlfriend[1].

Generally, abusers use a pattern of coercive tactics, such as isolation, threats, intimidation, manipulation, and violence, to gain and maintain power over victims and control their decisions. Some of them feel that they are entitled to control because they are the "head of the family," or simply as the "husband".

IPV may occur in any intimate relationship and is not limited by any boundaries of age, sex, race, ethnicity, socioeconomic status, or sexual orientation. IPV is one of the most pervasive forms of Gender-Based Violence (GBV) and can occur throughout the lifespan and elderly women are no exception contrary to the common belief.
Abuse in general, of the older person is covered by the term Elder abuse which is an umbrella term covering physical, psychological aggression, sexual, violence, financial exploitation including neglect and abandonment. Elder abuse is often perpetrated by a person known to the survivor in a close, personal way and expected to care for the elder. Unfortunately, elder abuse including IPV of the older woman occurs with little recognition or response, hidden from the public view and acknowledged as a private matter. However, evidence is accumulating, to indicate that elder abuse including IPV is an important public health and social problem[2].

The subject of "IPV among the older woman" exist in the margins between IPV / domestic violence and elder abuse[3], while some view it as a sub-set of the larger problem of elder abuse. Sadly, neither field adequately capture the experiences of older women survivors effectively.

The Madrid International Plan of Action on Ageing (MIPAA 2002) on the elimination of all forms of neglect, abuse and violence against older persons and its review in 2012 drew attention to the subject; it has not been adequately mainstreamed into ongoing discussion on violence against older women particularly in the area of IPV among the older woman[4].

Intimate partner violence (IPV) transcends all boundaries particularly age, yet, the policies and research in the field has done little to acknowledge it or explore the impact of age and aging on survivors' help-seeking behavior, perceptions of abuse, and approaches to healing and rehabilitation. It is important to fulfill this gap especially in the context of Sri Lanka with a steadily rising population of elderly people.

Magnitude of IPV among older woman

Two common indicators are used to measure prevalence of IPV: Life time prevalence of IPV

and prevalence in the last 12 months preceding the inquiry, the latter being the one selected in the assessment of the Sustainable Development Goal (SDG 5). As the discussion is on its occurrence in a specific age group, the latter prevalence in the last 12 months would give a clearer picture.

Although, global lifetime prevalence of intimate partner violence among ever-partnered women as 30.0% (95% CI = 27.8% to 32.2 %.) is well recognized[5] age disaggregated data on IPV among older women is not easily available or known. In addition, lack of uniform age criteria used to define "elder women", older women "by different researchers make results hard to compare.

A study in USA of 370 randomly sampled women over 65 years of age, (with 50% over 70 years) through a telephone interview found IPV prevalence as 2.2% within the last 12 months and 3.5% within the last 5 years respectively. The life time prevalence of IPV in this study was 26%. It is important to note that the severity of violence was described as severe in 21 % and moderate in 40% respectively. Among those who reported violence lifetime, physical abuse was reported at 6.2 % by older women aged 60 years and above, 3.5 % for lifetime sexual abuse, and 50.6 % for lifetime emotional abuse[6].

Another report from USA noted that women older than 55 years were more affected by IPV than younger women with spouses or intimate partners committing 13% to 50% of elder abuse[7]. A similar trend was reported from Spain with 29.4% of elderly women suffering from IPV[8].

A multicounty study carried out with 60-74-year-olds, found a prevalence of psychological and physical violence of 26.0% and 20.4%, respectively. This prevalence was 11.1% for men in two of the countries in the study[9].

A systematic review of cross-sectional population -based studies conducted with respect to 742 articles of which 91 underwent full evaluation found that prevalence ranged from 1.8-5.9% for physical violence, 1.2% for sexual violence and 1.9-36.1% for psychological violence. The country with the highest prevalence was China (36.1%), followed by Germany (13%), Brazil (5.9%) and the United States (1.9%). The same study highlighted the fact that psychological violence and economic abuse were the most common in this age group. The most frequent associated factors identified were alcohol consumption, depression, low income, functional impairment and exposure to violence in childhood[10].

A study from Belgium used population-based cross-sectional data (N = 1,472), to assess the extent adult women and men experienced psychological, physical or sexual violence from their current partner in the last 12 months. The annual prevalence of physical violence in a current relationship was 1.3%. Only women experienced sexual violence which amounted to 0.3%. 14% reported psychological violence and no difference were noted between women and men in this study[11].

A cross-sectional study, utilizing data from a national representative survey of 10,264 German women aged 16 to 86 years found that physical and sexual violence in the 12 months decreased as the age advanced with 8%, 3% and 1% of women in the three age groups 16 to 49 years, 50 to 65 years, and 66 to 86 years, respectively reporting physical violence. The prevalence of emotional and economic abuse and controlling behavior by partners remained nearly the same[12].

Although older women report lower rates of physical and sexual violence than their younger counterparts, the prevalence of verbal, emotional, and psychological abuse does not have the same inverse relationship to age.

The Demographic and Health Survey Sri Lanka (2016) found a national prevalence rate of IPV within the last 12 months of 17% among eligible women 15-49 years old married women.

Age disaggregated data clearly showed a small,

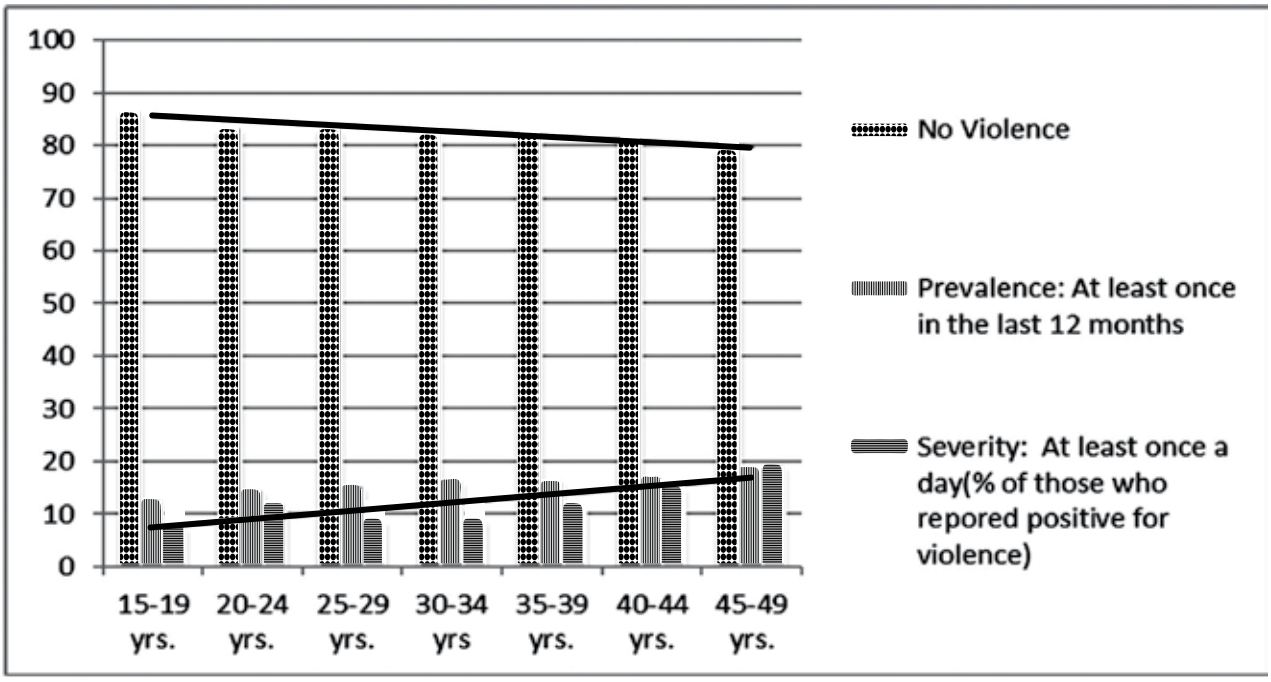

Figure 1Prevalence and severity of violence in relation to the age of the survivor SLDHS (2016)

but distinctive rising trend as women grew older[13].

It is clear that women remain at a fairly constant risk (if not increasing) for experiencing IPV, regardless of age particularly nonphysical violence, such as controlling "autonomy-limiting behavior" and deliberately inflicted emotional abuse.

Older age as a significant factor in IPV

Often IPV among the older woman is the ongoing abuse that continues to old age. However, some related factors predispose to violence among the older partners.

Although, older age is known to be associated with decreasing interest in sexual activity it should not be assumed to be an "asexual" period in life. A large study using face-to-face interviews of a national probability sample of 3,005 adults in the USA showed that although interest in sex was lower in older age groups, 59% of 75–85-year olds attributed some importance to sex. However, there were significant gender differences, with the greatest difference in the older age groups: 41.2% of males aged 75–85 stated an interest in sex compared with 11.4% of females the same age)[14].

There is no doubt that urogenital atrophy leading to soreness/dryness/pain during sex does cause a negative influence on sexual activity especially in post-menopausal women, but is well known that female sexuality in older age is heavily influenced by psychosocial factors and societal[15].

Gender norms and attitudes prevalent in most Asian societies including Sri Lanka molds the general perception and prejudices of an 'asexual' old age, of sex in older people being even disgusting, or simply ridiculous, particularly in relation to women.
The paradoxical acceptance of a virile older male as an acceptable position in the society leaves the female partner caught between this duality. At this point the older woman often resorts to avoidance tactics such as spiritual/religious involvement, major factor leading to marital disharmony and IPV.

Having grown up children, often married and the fear of a pregnancy among the younger subset of peri menopausal women may be further deterrents for the older woman to enjoy a healthy sexual relationship.

Spouses are often the care givers for the elder

male partner which can position themselves as targets for violence from the "habitual" perpetrator as well as from the husband affected by cognitive behavior problems. Interestingly, sometimes long-term abuse continues even with dementia may reflect long term power dynamics[16].

Barriers to seeking care among the older woman

Seeking assistance is a critical step in finding relief but is well known that only a small percentage of survivors of IPV seek help from an individual or an Agency: Governmental or Non-Governmental. DHS Sri Lanka 2016 found that only 28% of survivors who divulged violence had accessed help[17].

Women experience many barriers to accessing supportive services, such as feelings of shame, guilt or denial, lack of trust in others or fear of repercussions such as the perpetrator finding out or family members seeking revenge.

Older Women have significant internal and external barriers that prevent those seeking help.

Internal barriers such as traditional family values and gender norms that make them self - blame and internalizing IPV as their responsibility and feeling ashamed to seek care.

Older women feel constrained in reporting or seeking help, due to the value they place on the secrecy due to the belief that they should keep the fact within the family and not knowing where to go or not having the means to go.

The external barriers (related to others) include disbelief or non acceptance of existence of IPV by their children and other family members, unsupportive religious teachings often misinterpreted and misinformed by the clergy and indifferent or unwelcome response from previous care providers including law enforcement agencies.

The abusive partner may also directly prevent help seeking by threats of increased violence or indirectly through isolating her by limiting the contact and communication with friends, relatives and service providers.

Conclusion

Intimate partner violence of the older woman is a reality in contrast to the common belief and Si Lanka is no exception. Secrecy, often self-imposed, and denial by the society is what keeps the important public health problem invisible and unaddressed. Care providers need to move away from the tendency to think of partner violence as a problem only of younger women, understand the many barriers the older women need to surmount to seek help and promote more research and move towards eradicating intimate partner violence in older women.

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Review

Genito-Urinary Syndrome of Menopause (GUSM) - A Clinical entity in need of recognition

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Introduction

Hypo-estrogenic state affecting the genito-urinary tissue leads to genito-urinary syndrome of menopause (GUSM). The implications of this syndrome, accounts to external genital, urological and sexual morbidity. It is estimated that over 50% of menopause women are affected by GUSM. Nevertheless, due to embarrassing symptoms many women refrain from divulging the disease burden to their physicians. A consensus was reached in 2014 by the North American Menopause Society and the International Society for the Study of Women's Sexual Health that GUSM is a more inclusive and an accurate term to describe the conglomeration of external genital, urological, and sexual sequelae caused by hypo-estrogenism during menopause.[1]It was agreed the term GUSM facilitates to enhance health seeking behavior of women tormented by the stigmatized symptomatology. The GUSM is an evolving health issue as global proportion of menopausal women is on the rise and women's awareness is created by peer groups. Furthermore, 15% of pre menopausal women also experience symptoms due to GUSM.[2]

Pathophysiological considerations

Embryonic development of female external genitalia, lower vagina, urethra and trigone of the urinary bladder share a common origin. Hence, the genitalia and lower urinary tract processes a common oestrogen receptor function. Hypo estrogen state has effects on both vulvo-vaginal and lower urinary tract region. During post menopausal period the number of oestrogen receptors decline significantly.[2] Endogenous and exogenous oestrogen enhances the number and quality of oestrogen receptors following menopause. The role of activated oestrogen receptors in the genito-urinary tract is to promote epithelial and smooth muscle proliferation. Lack of oestrogen leads to thinning of genito-urinary epithelium and rugae due to loss of smooth muscle proliferation, breakdown of collagen and elastin. Oestrogen is a vaso-active hormone that increases blood flow facilitating vaginal lubrication by transudation across vaginal epithelium and secretions from uterine cervix and Bartholin gland[3]. The resulting changes due to lack of oestrogen cause genital irritation and trauma during sexual intercourse. The epithelial lining of vagina and urethra is a stratified non-keratinized squamous epithelium comprising superficial intermediate and basal layers. Oestrogenized epithelial lining stores glycogen which is utilized by lactobacilli to produce lactic acid to maintain the vaginal pH around 4.5. The hypo-estrogenized urethra and vaginal epithelium is colonized by potential pathogens replacing the healthy vaginal flora leading to frequent UTI (Urinary Tract Infection) and vaginitis. Urinary incontinence and frequency in post-menopausal women is due to atrophy of the urethra and bladder. The role of oestrogen receptors in bladder trigone and urethra is to increase sensory threshold to withstand bladder distention without leading to urinary incontinence. Oestrogen deprivation associated with menopause weakens connective tissue in urethral sphincter tissue causing stress incontinence.

Clinical manifestations of GUSM

Clinical manifestations of GUSM are divided into

external genital, urological and sexual symptoms and signs[4]. A summary of symptoms and associated complications are given in table 1. Clinicians need to evaluate symptoms objectively to plan investigations and treatment. The correlation between disease burden and physical findings are poor. Standard digital and speculum examination if needed should be performed with caution as vaginal stenosis, shortening and inflammation brings immense discomfort. Dyspareunia secondary to dry vagina is a common complaint. In anticipation of pain during intercourse spasms of vaginal muscles occur as a physiological response.

Evaluation and Management Strategies

GUSM is a chronic condition needing long term management. Comprehensive history is of importance to exclude symptoms mimicking GUSM. Local irritants, allergies, infections, valval dystrophy and premalignant conditions give rise to symptoms similar to GUSM[5]. Cornerstone of evaluation is pelvic examination with paying more attention to inspection. Atrophic vulvo-vaginal epithelial surface is smooth and shiny with echymotic patches. Fusion of labial folds, narrowing of vaginal introitus are features of oestrogen deprivation associated with GUSM. Vaginal pH shift towards 7, scarcity of lactobacilli, predominance of para-basal cells in vaginal smear and endometrial thickness less than 5mm support diagnosis of GUSM.

Life style modification to promote sexual intercourse has proven benefits to overcome symptoms of GUSM. Sexual intercourse enhances vaginal pliability, elasticity and the lubricative response due to promotion of vaginal musculature and epithelium[6]. Application of vaginal moisturizers and lubricants overcome vaginal dryness and itching during sexual intercourse as a temporary measure. The treatment of choice for GUSM symptoms is topical oestrogen therapy, with which quick reversal of oestrogen deprived changes in vaginal smear and shift of vaginal pH towards acidity is observed. Topical administration of oestrogen has limited value to overcome hot flushes and osteoporosis associated with menopause. Vaginal oestrogen therapy trials have demonstrated relief of urinary symptoms such as frequency, urgency and stress incontinence[7]. The modalities available to locally deliver oestrogen are creams, vaginal tablets and rings. Systemic administration of oestrogen is effective in controlling symptoms of

TABLE 1
External genital, urological, and sexual manifestations of genitourinary syndrome of menopause

External genital		Urological		Sexual
Signs and symptoms	Complications	Signs and symptoms	Complications	Signs and symptoms
Vaginal/pelvic pain and pressure	Labial atrophy	Frequency	Ischemia of vesical trigone	Loss of libido
Dryness	Vulvar atrophy and lesions	Urgency	Meatal stenosis	Loss of arousal
Irritation/burning	Atrophy of Bartholin glands	Postvoid dribbling	Cystocele and rectocele	Lack of lubrication
Tenderness	Intravaginal retraction of urethra	Nocturia	Urethral prolapse	Dyspareunia
Pruritus vulvae	Alkaline pH (5–7)	Stress/urgency incontinence	Urethral atrophy	Dysorgasmia
Decreased turgor and elasticity	Reduced vaginal and cervical secretions	Dysuria	Retraction of urethral meatus inside vagina associated with vaginal voiding	Pelvic pain
Suprapubic pain	Pelvic organ prolapse	Hematuria	Uterine prolapse	Bleeding or spotting during intercourse
Leukorrhea	Vaginal vault prolapse	Recurrent urinary tract infection	Urethral polyp or caruncle	
Ecchymosis	Vaginal stenosis and shortening			
Erythema	Introital stenosis			
Thinning/graying pubic hair				
Thinning/pallor of vaginal epithelium				
Pale vaginal mucous membrane				
Fusion of labia minora				
Labial shrinking				
Leukoplakic patches on vaginal mucosa				
Presence of petechiae				
Fewer vaginal rugae				
Increased vaginal friability				

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GUSM buthave unwanted effects like breast tenderness, weight gain and vaginal bleeding. Addition of a progestin to overcome unopposed oestrogen action too contributes to adverse effects. Systemic administration is suggested for relief from GUSM in women having hot flushes and in need of protection against osteoporosis[8]. The GUSM symptoms improve in 90% of individuals on topical oestrogen therapy and currently there is no evidence for periodical endometrial evaluation in asymptomatic women.[9]The general consensus among clinicians is local application of oestrogen cream for a period of six months followed by a treatment free interval of few weeks.

Novel approaches in management of GUSM are gaining popularity as an alternative to traditional hormone replacement therapy. Selective oestrogen receptor modulator (SERM) Ospemifene was approved by FDA in 2013. It improves vulvo-vaginal atrophy and dyspareunia in candidates not suitable for oestrogen therapy. Laser therapy has been introduced to overcome symptoms of GUSM. The quality of atrophic vaginal epithelium is converted to more vascular, thickened, increased glycogen deposited healthy tissue. These changes on follow up lasted beyond 12 weeks. The application of intravaginal oxytocin gel and dehydroepiandrosterone at research level are found to be promising agents to promote vaginal epithelial layer without endometrial stimulation[10,11].

Risks and benefit of treatment options for GUSM should be discussed between the clinician and the patient to optimize the outcome.

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Review

Complementary Care and non-hormonal medication for vasomotor symptoms of menopause: Alternatives to HRT

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Not all women with menopausal symptoms are suitable candidates for HRT (hormone replacement therapy). Some women, with no contra- indications, still prefer alternatives to HRT even after proper counselling due to various other reasons.

Women who seek treatment for menopausal symptoms should always beadviced on dietary modifications, life style adjustments, hormonal treatment options and other alternatives to HRT[1].With regards to the clinical manifestations of menopause, the main troubling symptoms for majority of women are the vasomotor symptoms (Table 1). While two-thirds of postmenopausal women experience hot flushes, 10-20% will experience severe symptoms that significantly affect their quality of life[2].

In the management of vasomotor symptoms, an integrated approach should be considered in those women who wish to consider alternatives to HRT or those who are having contraindications to HRT[4]. Fig.1 shows a modified algorithm for the management of vasomotor symptoms, which was based on evidence provided by a consensus group of international experts[4]. It integrates the use of life style measures, complementary therapies and pharmacological treatment options. However, this algorithm is not envisioned for those with premature menopause or those with risk factors for osteoporosis.

Fig1. Algorithm for the management of vasomotor symptoms[4]

1. Life style measures

A. Aerobic exercise

Although there were concerningevidence from randomized control trials with regard to the

Table 1. Clinical manifestations of menopause[3]

Vasomotor symptoms	Hot flushes
Neuropsychiatric symptoms	Sleep disturbance Depression and mood disturbance Memory and attention deficits
Genitourinary symptoms	Frequent urinary tract infections Urinary incontinence Vaginal dryness Sexual dysfunction
Musculoskeletal symptoms	Joint pain
Long-term health issues	Osteoporosis Coronary artery disease

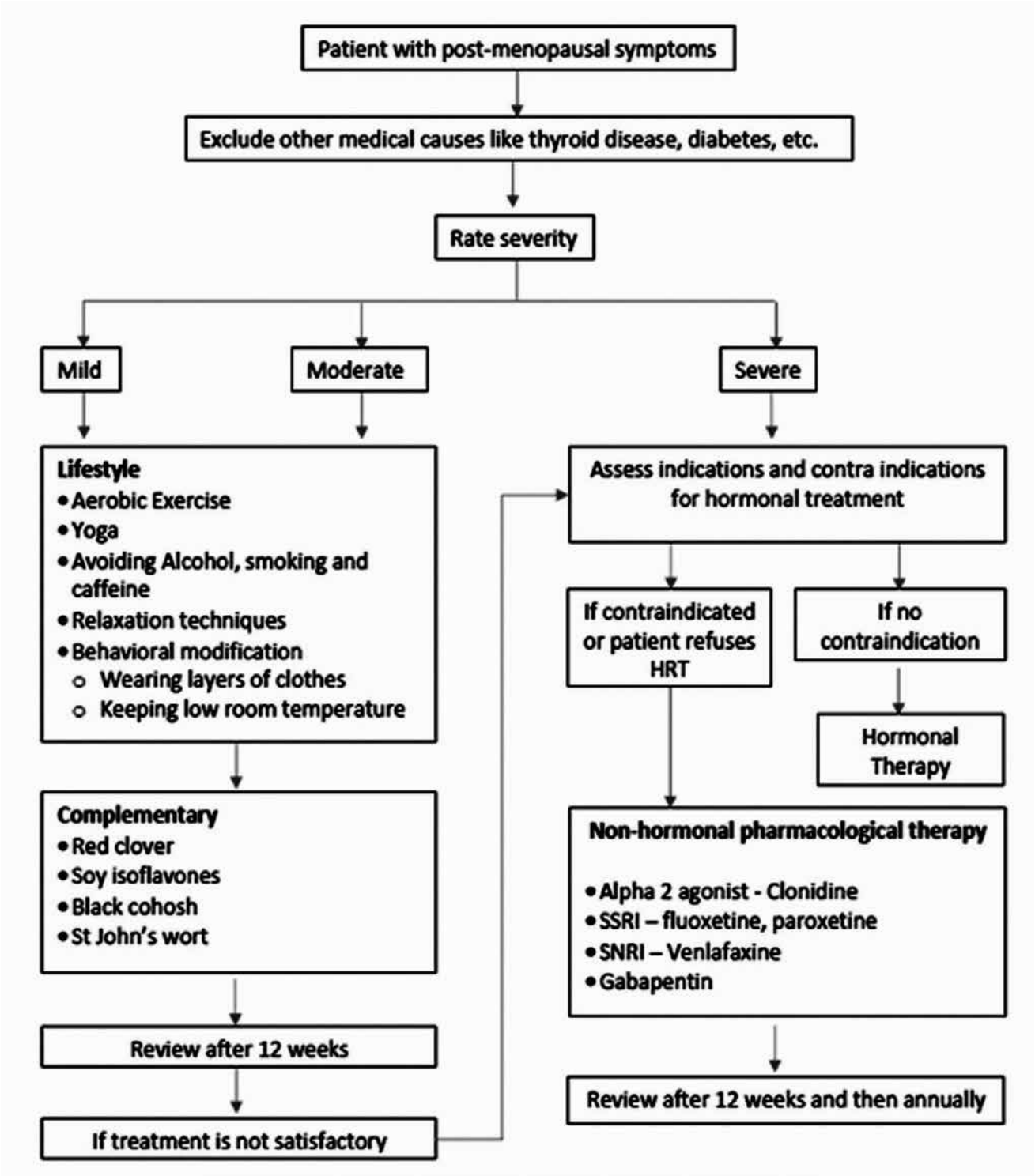

Fig1. Algorithm for the management of vasomotor symptoms[4]

effects of aerobic exercise on vasomotor and other menopausal symptoms[5], some evidence suggests that women who were more active are less likely to suffer menopausal symptoms[6]. Furthermore, it was noticed that there were significant improvements in some common menopause related symptoms like mood disturbances and insomnia with aerobic exercises in middle aged and menopaused women in several randomized trials[7].

B. High -impact exercise

Improvement of menopausal symptoms is not true for all types of activities, infrequent high-impact exercises actually makes things worse[7]. Regular sustained aerobic exercises like running and swimming appears to be a better option[6].

C. Yoga

According to a recent systematic review and a meta- analysis of thirteen randomized control trails, yoga seems to be effective and safe in reducing menopausal symptoms[8].

D. Health behavioral measures

Healthy behavioral measures like avoidance or reduction of alcohol and caffeine intake can aid in the reduction of frequency and the severity of the vasomotor symptoms[9]. As there is reasonable evidence to suggest beneficial effects of life style measures in managing menopausal symptoms, it is sensible to advice on these measures to women who seek advice to mitigate menopausal symptoms.

2. Complimentary therapy

Majority of women tend to use complimentary methods as oppose to hormonal therapy when conservative measures fail to control vasomotor symptoms[10]. Despite many types of medications being used all over the world, there are only limited and conflicting evidence for most of them. Furthermore, lack of regulatory bodies to herbal medicine makes them more difficult to analyze as each sample of medication may carry various combinations of active ingredients in varying amounts. Despite the sparse evidence, few agents such as soy phytoestrogens, black cohosh, red clover and St John's wort have shown to be effective[7].

A. Phytoestrogens

Soy, which contains phytoestrogens, has shown to be superior to placebo in over eight recent trials in treating vasomotor symptoms. However, some trials have only shown comparable effects[11]. Soy is considered a good alternative as it has minimal adverse effects even on long term use[11].Despite this, phytoestrogens should be avoided in patients with estrogen sensitive malignancies and those on anti-estrogen therapy[12].

B. Red clover

Red clover, Trifolium pretense is also a plant-based estrogen which has a similar action to Soy. There are couple of meta-analyses which show promising results in red clover users over placebo in controlling hot flushes[13,14].

C. Black cohosh

Black cohosh, Cimicifuga racemosaalso contains phytoestrogens, in addition to few more active ingredients which help in controlling vasomotor symptoms. Although a recent placebo control trial fail to show a significant benefit in black cohosh, few smaller studies has shown conflicting results[11].

D. St John's wort

St John's wort, which was widely used in the past with doubts of its efficacy, has recently been considered to be effective[15].

There are many commercial preparations available in the market with various combinations of above active ingredients, making them more attractive alternative to hormone therapy.

3. Non-hormonal pharmacological therapy

A. Alpha-2 agonists

For the alleviation of vasomotor symptoms, clonidine which is a centrally acting alpha-2 agonist is a popular alternative preparation. However, trial data are contradictory with regardto its efficacy, and least amount of evidence exist for its effective-

ness. Although an earlier double-blind randomized control trail had shown no evidence for hot flush reduction[16], a recent trail did demonstrate efficacy over hot flushes with the use of transdermal clonidine[17]. According to a systematic review and ameta-analysis of clonidine for hot flushes, there was a marginally significant benefit over placebo; but the effectiveness was not superior to estrogen preperations[18]. Adverse effects of clonidine such as drowsiness, transient skin rashes had discouraged its use among menopausal women[18,19].

B. Selective serotonin and noradrenaline reuptake inhibitors

As a non-hormonal pharmacological alternative to HRT, selective serotonin reuptake inhibitors (SSRIs) and selective noradrenaline reuptake inhibitors (SNRIs) areamong the commonly prescribed drugs to alleviate menopausal symptoms. These have a considerable amount of evidence to support the efficacy in the management of vasomotor symptoms[7].

Although there are some evidence to support fluoxetine[20] and paroxetine[21], their use should be avoided in patients using tamoxifen, as they can affect the metabolism of tamoxifen[22].

Among these drugs the most convincing data exist for the use of venlafaxine (SNRI) with the dosage of 37.5 mg twice daily[23]. However, the high incidence of nausea is one of the main drawbacks, which may cause cessation of therapy before maximum symptom relief has been achieved[7]. In addition, these preparations may also result in reduction in libido which could precipitate already reduced sexual response due to menopause[24].

Based on evidence from recent randomized clinical trials, desvenlafaxine (an analogue of venlafaxine) is an alternative feasible option to alleviate frequency and severity of hot flushes, which has demonstrated a reduction of hot flushes by 55-69%, while maintaining good tolerability and safety profile[25]. The optimum dosage was 100mg per day, and it should be started at 50mg per day for three days and then need to be titrated to 100mg per day, for its maximum efficacy and tolerability[25]. However, at present, its usage is licensed only in few countries[1].

C. Gabapentin

This neuropathic analgesic has shown superior effectiveness over placebo in some studies in managing vasomotor symptoms[1]. At a dosage of 900mg per day it has demonstrated a reduction in hot flush by 45% and symptom severity reduction by 54%[26]. In a recent randomized trial where gabapentin 600mg was compared with the use of low-dose transdermal estradiol 25 micrograms demonstrated that the both drugs are effective in symptomatic relief of moderate to severe hot flushes, while estrogen showed more efficacy[27]. Similar to SNRI the adverse outcome profile like drowsiness, dizziness and fatigue may hamper its use among the consumers[13,27].

4. Other complementary interventions

A. Acupuncture

There was conflicting evidence for the use of acupuncture in alleviation of menopausal symptoms[7]. However, a recent meta-analysis has shown that acupuncture does improve hot flush frequency and its severity in women experiencing natural menopause[28].

B. Reflexology

This aims to mitigate the stress and treat health conditions by applying pressure to specific areas of feet, hand and ears[7]. One randomized control trail has demonstrated reduction in vasomotor symptoms in women aged 45-60-year-old women by the using reflexology or non-specific foot massage. However, there was no significant difference among the two groups[29].

C. Magnetism

There is no known mechanism of action for the magnet therapy, which is available in the form of bracelets and insoles[7]. At present there is no evidence to support its efficacy[30].

Conclusion

The proficient management of menopausal symptoms is often an over looked aspect despite the

rising aged population in Sri Lanka. Alternative therapy to HRT that includes pharmacological and non-pharmacological measures should be considered in proper management of vasomotor symptoms among menopausal women. In order to achieve this goal, awareness programs should be implemented for the health care professionals, who would prescribe these drugs. The engagement of media should be considered to highlight viable options to the general population. Better access to all these treatment options, should be made available to these women through a dedicated clinics. Lastly, more research should be done in this avenue to find out newer treatment options and their efficacy for a better outcome in the future.

Conflict of interest

None declared.

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Case Report

A Case Report of Tubo-Ovarian Abscess in Postmenapausal Woman

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Introduction

Tubo-ovarian Abscess (TOA) is a serious complication of Pelvic Inflammatory Disease (PID) with 5%-10% mortality. TOAs are often polymicrobial in origin (30%-40%) & affect women in reproductive age group. TOAs in post-menopausal age group are rare & accounts to 1.7% of all TOAs[1]. TOA carries a high morbidity & can be life threatening with severe sepsis (mortality 5-10%). Approximately 15%-30% of female undergoing treatment for PID will be diagnosed with TOA. Reason for TOA formation may be due to delay in PID treatment or virulence of causative organism/s.

Case History

A 57 years old postmenopausal lady presented with acute onset worsening lower abdominal pain, fever& diarrhea. There was no history of per-vaginal discharges, chronic IUDs left in situ or post-menopausal bleeding.She was having fever, tachycardia and restlessness but was normotensive. Lower abdomen was tender. Pelvic examination revealed tender pelvic walls. Pelvic sonography revealedan atrophic uterus with bilateral complex ovarian cysts & basic investigations showed WBC 23000/µl, ESR 90mm/ 1st hour and CRP 234mg/l. HIV & TB screen were negative along with bacteriological cultures. High vaginal swab was positive for EBSL-Coliforms.Considering signs of Systemic Inflammatory Response Syndrome (SIRS), Sepsis six protocol was commenced together with Broad spectrum antibiotics. Contrast enhanced CT (CECT) was performed to exclude possible other intra-abdominal pathologies. CECT findings were in favor of TOAs as bilateral complex ovarian cysts with peri appendicular inflammation were seen. Condition responded for 14 days of antibiotics andlaparotomy was planned after a 6 weeks interval.

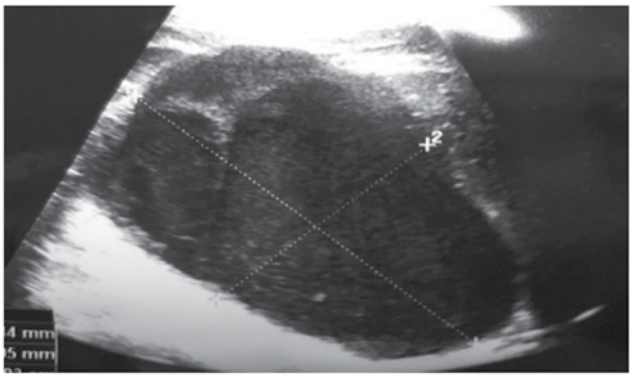

Fig.1-Transvaginal Scan Appearance of TOA of Index Case.

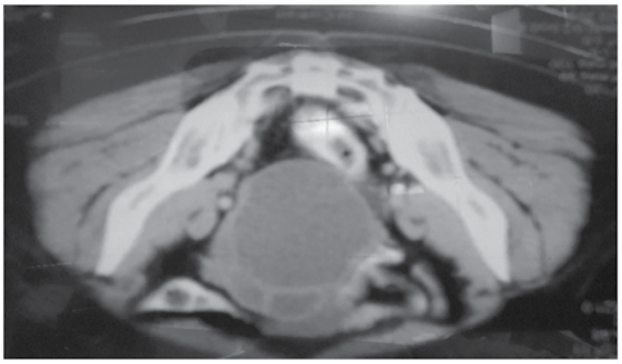

Fig.2-CECT Image of TOA of Index Case

Conclusion

TOA in post-menopausal age is rare.Ultrasound scan assessment is the first line investigation with 81% sensitivity & 78% specificity. But if inconclusive, CECT will assist diagnosis and differentiate from other causes. Presence of Ovarian vein entering the lesion is 94% sensitive & 100% specific for TOA[3].MRI has sensitivity of 95% & specificity of 89%.MRI has advantage over CT since it is non-irradiating imagine modality[4].Role of CA125 in differentiating malignant causes is less valuable in the presence of pelvic inflammation since peritoneal inflammation itself increase CA 125 value.

Medical management address up to 70% TOA cases with high recurrence rate. Interval clearance surgery about 6 weeks after initial event wills allows inflammation to settle. Thus morbidity/mortality due to surgical complications will be lesser. However, there should be a lower threshold for surgery as malignancy risk is about 47% in post-menopausal age group[2].

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CME

Continuing Professional Development (CPD)

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Introduction

Continuing Professional Development (CPD) is any sort of education outside of undergraduate or postgraduate curriculum that helps to maintain and further improve performance. It covers; knowledge enhancement, skills development and change in behaviour across all areas and includes both formal and informal learning. It is meant for all categories of healthcare professionals and aims to improve standards; the quality and safety for patients (General Medical Council, 2011). The responsibility for CPD lies with the individual who must identify deficiencies, plan and undertake CPD activities.

The hallmark of CPD is reflection, i.e. an individual needs to regularly reflect on the service he or she provides in order to identify deficiencies and take corrective measures (Moon, 1999). This is to maintain competency and be up to date. CPD activities may be individual or team based. The need for CPD activities should be based on the professional needs as well as the needs of the patients. Changes to existing practice should be implemented and its impact on the overall performance should be evaluated. Therefore it is like an audit cycle that needs to go on continuously until the healthcare professional ceases to practice.

Why CPD is important for doctors

It helps to maintain professional standards by updating undergraduate and postgraduate training, in order to implement changes in clinical practice. It will also help model healthcare towards meeting the needs of patients by keeping up with expectations of the public.

Ideally, a doctor would have to prove he or she has attended the CPD activities and present a summary of it to the annual appraisal to meet the requirements for renewing validation. This is still not being enforced in this mandatory manner at the Sri Lanka Medical Council (SLMC). The doctors attend CPD activities out of their own volition with no obligatory requirement to do so. If CPD activities are done in a methodical and scientific manner they may even enhance career prospects. Improvement of leadership skills and improved job satisfaction are other advantages.

The developmental goals of CPD must be tailored to improve the patient safety and quality of care provided by the respective individual and the team/s which he or she is part of in the healthcare system. The developmental goals must not be limited to clinical practice but involve the entire professional practice including non-clinical aspects as well. Research, training and teaching must be included in these goals to provide an overall improvement of an individual. A clinician's role may change with time and he or she must be able to adapt to these changes. For an example a clinician from the ministry of health has more emphasis on clinical aspects and less on research and teaching. However when the individual becomes a university academic there must be more emphasis paid on research and teaching in addition to clinical duties.

Content of CPD activities

The objective is to remain competent in all areas of practice. It is often better to have a mentor and to discuss CPD issues. However, CPD activities should broadly cover four domains; skills, knowledge and performance, quality and safety, com-

munication and teamwork and maintaining trust (General Medical Council, 2011).

Whatever issue that arises could be discussed informally or formally. Informal learning is by way of reflective practice. Other more formal methods include attending workshops, seminars and courses. Some activities can be planned but there will always be unplanned incidents, often adverse events which can be used as challenges to improve one's practice. These opportunities offer a chance for informal learning and reflection which will prove to be very fruitful and rewarding (General Medical Council, 2011; Schostak, 2010; World Federation for Medical Education, 2003). In addition if the goal is to improve the overall quality of care, feedback from patients, carers and colleagues will be essential. This will give a broader perspective on the need of the hour.

Conclusion

The concept of CPD is new to Sri Lanka. The responsibility lies with the healthcare individual, the employer and the public. The employer, in most cases the ministry of health is slowly realising this and appears to be getting more involved in CPD activities but there is room for further improvement. It needs to foster a learning environment and provide facilities and incentives to encourage CPD activities which must be coordinated, planned according to the priority and relevance with appropriate time allocation on a day-to-day basis and not just at the end of a year or when awaiting the appraisal.

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