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

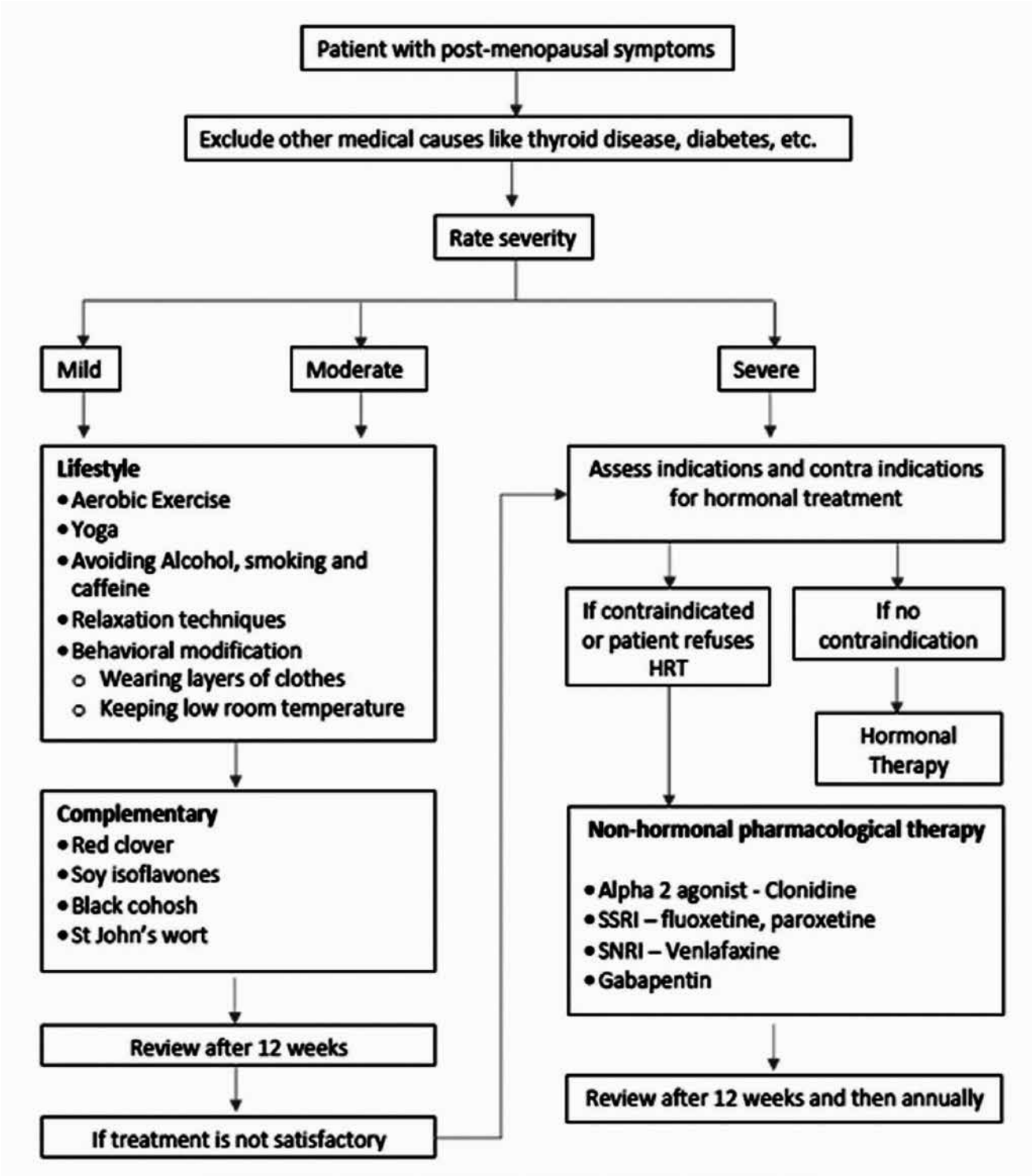

Fig1. Algorithm for the management of vasomotor symptoms[4]

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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