

Management of Menopause Hot Flashes

Management: General

<http://www.fpnotebook.com/GYN146.htm>

- A. Wear cool clothing
- A. Participate in regular [Exercise](#) program
- A. Avoid Exacerbating food products
 - 1. Caffeine
 - 1. Alcohol
 - 1. Spicy food
- A. Vitamin Supplementation
 - 1. [Vitamin B6](#) may be helpful
 - 1. [Vitamin E](#) is no more effective than [Placebo](#)

Management: Medications

- [A. Estrogen Replacement](#) Therapy
- [A. Progesterone](#) transdermal cream (20 grams/day)
- A. Megace ([Progestin](#)) 20 mg PO bid
- [A. Clonidine](#) 0.1 - 0.2 mg PO qhs (or transdermal patch)
 - 1. (1994) JCO 12:155
- A. Venlafaxine
 - 1. Option one: 12.5 mg PO bid
 - a. (1998) JCO 16:2377
 - 1. Option two: 75 mg po qhs
- A. Bellergal-S 100
 - 1. Small risk of addiction
- [A. Aldomet](#) 250 mg PO bid

Management: Herbs and Dietary Supplements

- A. Possible benefit
 - 1. [Phytoestrogens](#) (see [Soy Protein](#))
- A. Unlikely benefit
 - 1. [Dong Quai](#) (No better than [Placebo](#))
 - 1. [Black Cohosh](#) (No data supporting efficacy)
 - 1. [Evening Primrose Oil](#)

Menopause Vasomotor Symptom Relief

<http://www.aafp.org/afp/20040715/practice.html#a>

The North American Menopause Society (NAMS) has released an evidence-based position statement on the treatment of vasomotor symptoms associated with menopause to provide recommendations on the most effective treatments. The Editorial Board that created the position statement was composed of experts from clinical practice and research who conducted a search of the medical literature for clinical trials that presented data specific to the treatment of vasomotor symptoms. The complete position statement was published in the January 1, 2004, issue of Menopause.

Vasomotor symptoms, as defined by NAMS, includes hot flashes and night sweats. Hot flashes are recurrent, transient episodes of flushing, perspiration, and a sensation ranging from warmth to intense heat on the upper body and face, sometimes followed by chills. Night sweats are hot flashes that occur with perspiration during sleep. The terms hot flash, hot flush, and vasomotor symptoms often are used to describe the same condition, but the NAMS prefers hot flash to hot flush.

The exact cause of hot flashes has not been determined, but they may be caused by the changing endogenous estrogen concentrations associated with menopause. Most hot flashes are mild to moderate in intensity and usually abate over time without therapy. Although available treatments do not cure hot flashes, they can provide significant relief.

Treatment Evidence

Various treatments have been used to relieve hot flashes, including lifestyle modification, nonprescription remedies, and prescription therapies. The authors note that the placebo effect is higher in trials of hot flashes than for many other conditions. Clinical trials for hot flashes also are affected by the fluctuations in symptoms among perimenopausal women and by the cessation of hot flashes over time.

The NAMS recommends no treatment until the hot flashes become bothersome to the woman. The decision to begin treatment should be based on the severity of symptoms, an assessment of treatment-related risks, and the woman's attitudes about menopause and medications. In most women, hot flashes will abate over time without intervention.

Lifestyle modification

For women who need relief from mild menopause-related hot flashes, the NAMS recommends first considering lifestyle modifications such as manipulating the environment to keep the core body temperature cool, getting regular exercise, quitting smoking, and using relaxation techniques such as paced respiration.

Studies have shown that lowering air temperature reduces hot flashes. Women reported that keeping cool by dressing in layers, using a fan, and consuming cool or cold food and drinks helped prevent hot flashes. Conversely, consuming hot food and drinks may raise the core body temperature.

In observational studies, physically active women reported fewer and less severe hot flashes than women with sedentary lifestyles in the same age groups. Exercise, especially strenuous exercise that causes perspiration, may trigger hot flashes in symptomatic women. Although studies have shown that a high body mass index predisposes women to more frequent or severe hot flashes, no studies have been performed to determine if losing weight reduces the risk of having hot flashes.

Women who do not smoke typically experience fewer hot flashes than women who do smoke. The risk of experiencing hot flashes increases with the amount smoked. No studies have been performed to test the effects of smoking cessation on the severity and rate of hot flashes.

Although not evaluated in controlled clinical trials, some women report having fewer hot flashes when participating in relaxation activities, such as yoga, massage, meditation, or a leisurely bath. The relaxation technique that has demonstrated efficacy in reducing hot flashes is paced respiration (slow, controlled, diaphragmatic breathing) when a hot flash begins.

Nonprescription Remedies

Many women use nonprescription remedies to treat hot flashes, including isoflavones, black cohosh, and topical hormone creams containing progesterone. Other options that are used less commonly include dong quai, evening primrose oil, ginseng, licorice, and mixtures of Chinese herbs. The clinical evidence regarding the efficacy and long-term safety of these remedies is lacking. Also, most nonprescription remedies for hot flashes are categorized as dietary supplements and, therefore, are not regulated by the U.S. Food and Drug Administration.

Isoflavones. Isoflavones are plant-derived compounds that exhibit both hormonal and nonhormonal properties. They are found in whole food and commercial preparations, such as purified isoflavone supplements, fortified foods, and mixed preparations containing isoflavones. Two common sources are soy and red clover. Efficacy in clinical trials of soy foods and isoflavone supplements has been mixed; however, for women with frequent hot flashes, the NAMS advises physicians to consider suggesting their use. The authors state that, in dosages of 40 to 80 mg per day, the potential for side effects seems minimal. For red-clover isoflavones, the adverse effects also are minimal; however, the long-term safety of red clover has not been confirmed.

Black cohosh. There are no known reports of serious adverse effects or drug interactions with black cohosh. Moderate side effects include gastrointestinal upset. The effects of long-term use are unknown. Because of its low incidence of side effects, the authors recommend the use of a black cohosh supplement for less than six months. The authors caution that black cohosh should not be used in women with breast cancer, because the currently available evidence is contradictory.

Dong quai. This herb commonly is used as part of an individually tailored herbal mixture in traditional Chinese medicine for the treatment of gynecologic conditions. A single clinical trial found no benefit from dong quai for the relief of hot flashes. The use of dong quai is contraindicated in women receiving warfarin (Coumadin). NAMS does not recommend the use of dong quai for the relief of hot flashes.

Evening primrose oil. Preparations from the oil of evening primrose seeds have been used for menopause-related hot flashes. However, the only trial conducted on evening primrose oil found no significant improvement in the number of hot flashes. Side effects include diarrhea and nausea. NAMS does not recommend the use of evening primrose oil for hot flash relief.

Ginseng. A randomized, placebo-controlled, double-blind trial found that *Panax ginseng* showed no benefit over placebo on hot flash scores. Case reports have associated ginseng

with uterine bleeding and mastalgia with diffuse breast nodularity. Ginseng should not be used with monoamine oxidase inhibitors (MAOIs), stimulants, or anticoagulants. NAMS does not recommend the use of ginseng for hot flash relief.

Licorice. The root of the licorice plant is used in many traditional Chinese medicine preparations. There is no clinical data regarding the safety or efficacy of licorice for treating hot flashes. Large chronic doses of licorice may result in cardiac arrhythmias, cardiac arrest, and pseudoprimary aldosteronism (including symptoms of hypertension, hypokalemia, and edema). Licorice should not be used with diuretics. NAMS does not recommend the use of licorice for hot flash relief.

Chinese herb mixtures. The only clinical trial of Chinese herb mixtures found that they provided less benefit than placebo after three months. However, women in this study all received the same mixture, rather than individualized preparations. NAMS does not recommend the use of Chinese herb mixtures for relief of hot flashes.

Vitamin E. One study found that vitamin E was no more effective than placebo in improving scores in an 11-symptom menopause index. No acute adverse effects have been noted with vitamin E use in dosages up to 1,200 IU per day. Women with a vitamin K deficiency may experience increased uterine bleeding with high doses of vitamin E. Because vitamin E appears to be nontoxic at low doses, inexpensive, and available without a prescription, the NAMS states that it is a reasonable option for the treatment of hot flashes.

Topical progesterone creams. Commercial topical progesterone preparations vary widely in formulations, dosages, additional ingredients, and recommended applications sites. Few data support the efficacy of topical progesterone cream. Although no adverse effects have been reported with progesterone creams, safety concerns should be the same as for other progesterone preparations. NAMS does not recommend the use of progesterone creams for hot flash relief.

Other options. Single clinical trials found no benefit for acupuncture or magnet therapy in relieving hot flashes. NAMS does not recommend the use of acupuncture or magnet therapy for hot flash relief.

Prescription Therapies: Hormonal Options

The most commonly prescribed hormone is estrogen, used alone or with a progestogen for women with a uterus. Other hormones used include progestogens alone, oral contraceptives, androgen-estrogen, and custom hormonal preparations.

Estrogen therapy and estrogen plus progestogen therapy. Many trials have shown that estrogen therapy (ET) and estrogen plus progestogen therapy (EPT) are effective in relieving menopause-related hot flashes. These therapies may take up to four weeks before the full effect is achieved. Most physicians consider ET and EPT to be the therapeutic standard for the treatment of hot flashes.

Current data from the Women's Health Initiative (WHI) and the Heart and Estrogen/progestin Replacement Study (HERS) demonstrate that EPT may be linked with increased risks for coronary heart disease, breast cancer, thromboembolism, stroke, and dementia. ET and EPT are contraindicated in women with a history of hormone-sensitive

cancer, liver disease, a history of blood-clotting disorders, and confirmed cardiovascular disease.

Potential side effects of ET include breast tenderness, uterine bleeding, nausea, abdominal bloating, fluid retention in extremities, headache, dizziness, and hair loss. Additional adverse effects of EPT include mood changes and the potential for more uterine bleeding than with ET alone.

According to the NAMS recommendations, treatment of moderate to severe menopause symptoms (including hot flashes) is the primary indication for systemic ET and EPT. NAMS recommends considering lower-than-standard doses of ET and EPT. For all women with an intact uterus who are using ET, NAMS recommends the administration of adequate progestogen, either in a continuous-combined or continuous-sequential EPT regimen.

Progestogen. The NAMS recommends that the primary menopause-related indication for progestogen use is endometrial protection from unopposed ET. However, progestogen alone may be considered for the treatment of hot flashes if the benefit-risk profile is acceptable to the patient.

Medroxyprogesterone acetate. Several studies have demonstrated that intramuscular and oral forms of this progestin effectively relieve menopause-associated hot flashes in healthy women, and in women with breast or endometrial cancer.

Megestrol acetate. One study found a significant reduction in hot flashes in women receiving megestrol acetate. The full efficacy of this oral progestin on reducing hot flashes may not be observed until after three or four weeks of therapy. Women who are receiving concurrent tamoxifen may experience an initial increase in hot flashes before any decrease is noticed. No long-term data are available regarding the long-term safety of megestrol acetate for treatment of hot flashes in women with breast cancer. Side effects include increased appetite and, possibly, exacerbation of preexisting diabetes and an increase in thromboembolic events.

Oral contraceptives. One study showed a substantial reduction in the number and severity of hot flashes in perimenopausal women receiving an oral contraceptive; however, this reduction was not statistically significant. Contraindications to the use of oral contraceptives include a history of blood clots, cardiovascular disease, migraine, hormone-sensitive carcinoma, jaundice, or liver disease. Women who are older than 35 years and smoke should not use oral contraceptives. The most common adverse effects include vomiting, nausea, abdominal bloating, breakthrough uterine bleeding, change in menstrual flow, edema, melasma, and migraine. NAMS supports the use of low-dose, combined estrogen-progestin oral contraceptives for perimenopausal women who need hot flash relief and contraception and who do not smoke or have other contraindications.

Androgen-estrogen therapy. One androgen-estrogen product is marketed for the treatment of moderate to severe vasomotor symptoms not treated by estrogen alone, but clinical trial data to support this claim are lacking. Contraindications and adverse effects are the same as for estrogen therapy, along with alopecia, acne, deepening of the voice, and hirsutism.

Custom hormone preparations. Custom-made formulations prepared by a pharmacist have not been adequately studied for any indication, including hot flash efficacy. Side

effects and other safety issues of these products have not been determined. NAMS does not recommend these preparations for hot flash relief because of the lack of efficacy and safety data on the specific compound prescriptions.

Prescription Therapies: Nonhormonal Options

In women who have hot flashes and who cannot receive hormone therapy, there are prescription drugs available for other indications that have shown some efficacy in relieving hot flashes. Certain prescription antidepressants may decrease hot flashes in women, including those women with a history of breast cancer.

Venlafaxine. A clinical trial demonstrated that the antidepressant venlafaxine reduced hot flashes rapidly, with full effect noted within one to two weeks. Another study showed that venlafaxine was well tolerated at dosages up to 150 mg per day. Contraindications to venlafaxine include concomitant use of MAOIs. Inhibitors. Adverse effects include somnolence, dizziness, constipation, and sexual dysfunction.

Paroxetine. Several studies have shown that use of paroxetine significantly decreases hot flashes. The recommended initial dosage for treating depression is 20 mg per day. Contraindications include concomitant use of MAOIs or thioridazine, and caution is advised with concomitant use of warfarin. Adverse effects include asthenia, sweating, nausea, decreased appetite, insomnia, somnolence, and dizziness.

Fluoxetine. One study found that fluoxetine reduced the frequency of hot flashes (although not as significantly as venlafaxine) and was well tolerated. Contraindications and side effects are the same as with paroxetine. If there are no contraindications, the NAMS recommends the use of venlafaxine (37.5 to 75 mg per day), paroxetine (12.5 to 25 mg per day), or fluoxetine (20 mg per day) for women with hot flashes who are not candidates for hormone therapy, including breast cancer survivors.

Gabapentin. This anticonvulsant, when used in dosages of 100 to 300 mg per day, has been shown to reduce hot flashes effectively. Hypersensitivity to gabapentin is the only contraindication. Adverse effects include somnolence, ataxia, dizziness, fatigue, and nystagmus. The NAMS recommends the use of gabapentin for hot flash relief.

Clonidine. This antihypertensive drug has demonstrated efficacy at reducing the frequency of hot flashes. Contraindications include cardiac sinus node function impairment, and arrhythmias have been noted at high dosages. Adverse effects include dry mouth, dizziness, drowsiness, constipation, and sedation.

Methyldopa. Two studies found that methyldopa reduced menopause-related hot flashes, but the improvement was modest. Contraindications include active hepatic disease and the use of MAOIs. Side effects may include sedation, headache, asthenia, edema, and weight gain. Because of its toxicity, the NAMS does not recommend the use of methyldopa for treatment of hot flashes.

Bellergal spacetabs. There are limited data to support the efficacy of this sedative in treating menopause-related hot flashes. Because of its toxicity, the NAMS does not recommend the use of Bellergal for treatment of hot flashes.

Summary

The NAMS recommends first considering lifestyle changes, alone or combined with a nonprescription remedy (such as dietary isoflavones, vitamin E, or black cohosh) for the relief of mild vasomotor symptoms. For moderate to severe menopause-related hot flashes, prescription systemic estrogen-containing products are still the therapeutic standard. For women with concerns or contraindications to estrogen-containing products, possible treatment options include prescription progestogens, venlafaxine, paroxetine, fluoxetine, or gabapentin.