Herbal Medicine for Treating Hot Flashes

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Abstract

Although some alternative therapies like botanical and herbal therapies have shown promise for relieving menopause symptoms such as hot flashes, more research is needed. Eighty-five percent of the women in the United States experience hot flashes of some kind as they approach menopause and for the first year or two after their periods stop. Between 20 and 50% of women continue to have them for many more years. As time goes on, the intensity decreases. In this review we focus on the evidence based herbal medicine in particular with herbs that have antidepressant effects.

Keywords: Black Cohosh, Evening primrose oil, Flaxseed Oil, Ginseng, Herbal medicine, Hot flashes, Saffron, St. John's Wort



Herbal Medicine for ...

Many women reject the risks associated with hormone replacement therapy to treat their menopause symptoms and instead seek relief from alternative sources. As menopausal women face fluctuating levels of estrogen and progesterone, they will likely experience symptoms including hot flashes, insomnia, depression, breast pain, and mood swings. There are many symptoms of menopause and perimenopause [1]. Different experience different mixes of symptoms, depending mostly on hormonal makeup and lifestyle, and most women report the experience of hot flashes. Research shows eighty-five percent of American women experience them within the first year or two of menopause [2].

Up to half of women continue to have them regularly for years following the onset of menopause. Hot flashes are mostly caused by the hormonal changes of menopause, but can also be affected by lifestyle and medications. A diminished level of estrogen has a direct effect on the hypothalamus, the part of the brain responsible for controlling your appetite, sleep cycles, sex hormones, and body temperature. Although some alternative therapies like botanical and herbal therapies have shown promise for relieving menopause symptoms such as hot flashes, more research is needed [3].

Botanicals and herbs that may help relieve hot flashes include

Evening primrose oil is often used to treat hot flashes, although there is no scientific evidence to support this. Side effects include nausea and diarrhea. Women taking certain medications, such as blood thinners, should not take evening primrose oil, evening primrose has a cooling effect on the skin and regulates the production of estrogen. It can act

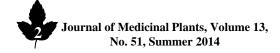
as a sleep aid due to its high gamma linolenic acid count, and increased prostaglandin production [4].

Soy products: Plant estrogens, found in soy products, are thought to have weak estrogen-like effects that may reduce hot flashes. Soy foods, not supplements, are recommended [4].

Black Cohosh: Black cohosh is among the most popular and longest-studied natural hot flash remedies for women who don't want to turn to hormone replacement antidepressants to treat their menopause symptoms. Black cohosh is derived from a plant in the buttercup family, and it has been used for centuries. It is thought to behave similarly to serotonin in the brain. This behavior includes easing feelings depression and regulating body temperature. Despite this, according to the National Center on Complementary and Alternative Medicine (NCCAM), research to date remains mixed [5].

Flaxseed Oil: Fatty acids, such as those found in flaxseed oil, have been thought to be effective in reducing menopausal symptoms. Flax contains plant lignans which are similar to estrogen, possibly causing estrogen levels to stabilize in menopausal women [6].

St. John's Wort: Among the most popular herbs used in the United States, St. John's wort has long been an alternative treatment for menopausal mood swings, improved sleep, relaxation, and reduced depression and anxiety. Derived from a wild flowering plant called *Hypericum perforatum*, the leaves and flowers are harvested and dried. Scientific studies affirm that while St. John's wort is effective for treating mild depression, it works no better than a placebo for treating severe depression [6, 7].



Ginseng: Ginseng is an herb used for its therapeutic health benefits for as many as 5,000 years by the Chinese, Koreans, and Native Americans. It may be used to treat menopausal symptoms of fatigue, anxiety, and stress [6, 7].

Antidepressants

Low-dose antidepressant medication may help forestall a hot flash by rebalancing or intercepting the chemicals in the brain that transmit the hot flash alarm, epinephrine and serotonin [3].

Saffron (Crocus sativus)

A number of recent experimental studies and clinical trials have been indicated that saffron is effective in the treatment of mild to moderate depression [8-13]. It has been suggested that serotonergic mechanism is involved in the antidepressant effect of saffron. As a therapeutically plant, saffron (dried stigma of *Crocus sativus* L. that belongs

to the Iridaceae family) is considered an excellent stomach ailment and an antispasmodic, helps digestion and increases appetite [12-13]. It also relieves renal colic, reduces stomachaches and relieves tension and is effective in the treatment of Alzheimer's disease [14-16]. Recent studies indicate its potential as an anti cancer agent and memory enhancer [15, 16]. A double blind randomized clinical trial suggests that saffron is effective in the treatment of PMS symptoms [17]. In this small preliminary double-blind and placebo controlled randomized trial, stigma of Crocus sativus was found to be effective in relieving symptoms of PMS. The clinical relevance of this finding was emphasized by in the improvements seen the Total Premenstrual Daily **Symptoms** and the Hamilton Depression Rating Scale [17]. Saffron does not cause sexual side effects generally associated with fluoxetine use; indeed it can prevent or treat some aspects of fluoxetine induced sexual impairment [18, 19].

References

- **1.** Cardini F, Lesi G, Lombardo F and Van der Sluijs C. MSCG Menopause SurveyCollaborative Group. The use of Complementary and Alternative Medicine by women experiencing menopausal symptoms in Bologna. *BMC Women's Health* 2010; 10: 7.
- **2.** Lloyd KB and Hornsby LB. Complementary and alternative medications for women's health issues. *Nutrition in Clinical Practice* 2009; 24 (5): 589 608.
- **3.** Shen W and Stearns V. Treatment strategies for hot flushes. *Expert Opinion in Pharmacotherapy* 2009; 10 (7): 1133 44.

- **4.** Speroff L. Alternative therapies for postmenopausal women. International Journal of Fertility and Women's Medicine 2005; 50 (3): 101 14.
- **5.** Shahnazi M, Nahaee J, Mohammad-Alizadeh-Charandabi S and Bayatipayan S. Effect of black cohosh (cimicifuga racemosa) on vasomotor symptoms in postmenopausal women: a randomized clinical trial. *J. Caring Sciences* 2013; 2 (2): 105 13.
- **6.** Bair YA, Gold EB, Zhang G, Rasor N, Utts J, Upchurch DM, Chyu L, Greendale GA, Sternfeld B and Adler SR. Use of

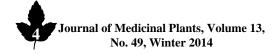


Herbal Medicine for ...

complementary and alternative medicine during the menopause transition: longitudinal results from the Study of Women's Health Across the Nation. *Menopause* 2008; 15 (1): 32 - 43.

- **7.** Low Dog T. Menopause: a review of botanical dietary supplements. *American Journal of Medicine* 2005; 118 Suppl 12B: 98 108.
- **8.** Akhondzadeh S, Fallah Pour H, Afkham K, Jamshidi AH and Khalighi-Cigarodi F. Comparison of *Crocus sativus* L. and imipramine in the treatment of mild to moderate depression: a pilot double-blind randomized trial [ISRCTN45683816]. *BMC Complementary and Alternative Medicine* 2004; 4: 12.
- **9.** Akhondzadeh S, Tamacebi-pour N, Noorbala AA, Amini H, Fallah Pour H, Jamshidi AH and Khani M. *Crocus sativus* L. in the treatment of mild to moderate depression: A double-blind, randomized and placebo controlled trial. *Phytotherapy Research* 2005; 19: 25 9.
- **10.** Noorbala AA, Akhondzadeh S, Tamacebipour N and Jamshidi AH. Hydro-alcoholic extract of *Crocus sativus* L. versus fluoxetine in the treatment of mild to moderate depression: A double-blind, randomized pilot trial. *Ethnopharmacol*. 2005; 97: 281 4.
- **11.** Akhondzadeh Basti A, Moshiri E, Noorbala AA, Jamshidi AH, Abbasi SH and Akhondzadeh S. Comparison of petal of *Crocus sativus* L. and fluoxetine in the treatment of depressed outpatients: a pilot double-blind randomized trial. *Progress in Neuropsychopharmacology and Biological Psychiatry* 2007; 31: 439 42.

- **12.** Moshiri E, Basti AA, Noorbala AA, Jamshidi AH, Hesameddin Abbasi S and Akhondzadeh S. *Crocus sativus* L. (petal) in the treatment of mild-to-moderate depression: a double-blind, randomized and placebo-controlled trial. *Phytomedicine* 2006; 13: 607 11.
- 13. Shahmansouri N, Farokhnia M, Abbasi SH, Kassaian SE, Noorbala Tafti AA, Gougol A, Yekehtaz H, Forghani S, Mahmoodian M, Saroukhani S, Arjmandi-Beglar A and Akhondzadeh S. A randomized, double-blind, clinical trial comparing the efficacy and safety of *Crocus sativus* L. with fluoxetine for improving mild to moderate depression in post percutaneous coronary intervention patients. *Journal of Affective disorders* 2014; 155: 216-22.
- **14.** Akhondzadeh S. Shafiee Sabet M, Harirchian MH, Togha M, Cheraghmakani H, Razeghi S, Hejazi SS, Yousefi Alimardani R, Jamshidi A, Rezazadeh SA, Yousefi A, Zare F, Moradi A and Vossoughi A. A 22-week, multicenter, randomized, double-blind controlled trial of Crocus sativus mild-to-moderate in the treatment of Alzheimer's disease. Psychopharmacology (Berl) 2010; 207: 637 - 43.
- **15.** Akhondzadeh S, Sabet MS, Harirchian MH, Togha M, Cheraghmakani H, Razeghi S, Hejazi SSh, Yousefi MH, Alimardani R, Jamshidi A, Zare F and Moradi A. Saffron in the treatment of patients with mild to moderate Alzheimer's disease: a 16-week, randomized and placebo-controlled trial. *Journal of Clinical Pharmacy and Therapeutics* 2010; 35: 581 8.



- **16.** Farokhnia M, Shafiee Sabet M, Iranpour N, Gougol A, Yekehtaz H, Alimardani R, Farsad F, Kamalipour M and Akhondzadeh S. Comparing the efficacy and safety of *Crocus sativus* L. with memantine in patients with moderate to severe Alzheimer's disease: a double-blind randomized clinical trial. Human Psychopharmacology 2014; 29 (4): 351 9.
- **17.** Agha-Hosseini M, Kashani L, Aleyaseen A, Ghoreishi A, Rahmanpour H, Zarrinara AR and Akhondzadeh S. *Crocus sativus* L. (saffron) in the treatment of premenstrual syndrome: a double-blind, randomised and placebo-controlled trial. *BJOG*. 2008; 115: 515 9.
- **18.** Modabbernia A, Sohrabi H, Nasehi AA, Raisi F, Saroukhani S, Jamshidi A, Tabrizi M, Ashrafi M and Akhondzadeh S. Effect of saffron on fluoxetine-induced sexual impairment in men: randomized double-blind placebo controlled trial. *Psychopharmacology* 2012; 223 (4): 381 8.
- **19.** Kashani L, Raisi F, Saroukhani S, Sohrabi H, Modabbernia A, Nasehi AA, Jamshidi A, Ashrafi M, Mansouri P, Ghaeli P and Akhondzadeh S. Saffron for treatment of fluoxetine-induced sexual dysfunction in women: randomized double-blind placebocontrolled study. *Human Psychopharmacol*. 2013; 28 (1): 54 60.

