



Personalised Treatment Options for Menopausal Women Using Ayurveda and Aromatherapy

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ABSTRACT

Menopause is defined as the time of cessation of ovarian function resulting in permanent amenorrhea. According to U. S. Census data, there are about 37.5 million women reaching or currently at menopause out of which about 6 million American women take Hormonal Replacement therapy (HRT). Long term effects of Hormonal Replacement Therapy include dementia, osteoporosis, heart ailments and cancer. Menopause can cause severe symptoms which can affect day to day life of women such as mood swings, cramps, breast tenderness and sleep deprivation. A same herbal formulation or a same allopathic treatment cannot be given to every woman suffering from menopause as every woman has different menopausal symptoms and every herb has different active ingredient to cure a particular symptom. In view of today's fast paced lifestyle and the limitations of modern medicine, there is an urgent need of alternative therapies such as polyherbal therapy and aromatherapy which not only provides symptomatic relief but also provides safe and effective management of the condition. A multidimensional and easy approach based on Ayurveda and Aromatherapy promises to ease this transition for a woman and provides personalized treatment options based on the constitution viz vata, pitta and kapha dominance.

Keywords: Aromatherapy, Ayurvedic herbs, Estrogen, HRT, Menopause, Progesterone.

INTRODUCTION

Menopause is defined as the time of cessation of ovarian function resulting in permanent amenorrhea. This results due to a sudden drop in the female hormones like estrogen and progesterone leading to different symptoms like hot flashes, migraines, vaginal dryness, mood swings, osteoporosis, loss of libido, weight gain ¹.

Estrogen

Estrogen is produced in three main places in a woman's body: the ovaries, the adrenal glands and the fat cells. Estrogen facilitates blood clotting, helps breast stimulation, reduces sex drive, increases the amount of body fat, magnifies the chances of breast cancer. Estrogen also influences how the body uses calcium, an important mineral in the building of bones, and helps maintain healthy level cholesterol in the blood. Estrogen also keeps the vagina healthy. The main purpose of estrogen is to make the uterine lining, the endometrium, ready to implant a fertilized egg for the event fertilization. To aid in this function, estrogen will promote water retention, fat storage, maturation of the female adolescent. All of which is OK if pregnancy is likely. Excess estrogen causes the body to prepare for embryo implantation all the time. This state of over-preparation is the cause of sluggish blood circulation, migraines, increased clotting, high stroke risk, disrupted copper/zinc ratios in brain cells/ mood swings, fibroids, endometriosis. Every system in the body has a feedback loop to keep balance. ²

Progesterone

It Controls blood clotting, safeguards against chances of cysts, helps to increase sex drive, helps to use the body fat by converting it into energy, reduces the chances of acquiring breast cancer. Progesterone maintains the endometrium in pregnancy, promotes new bone formation, regulates blood pressure, fat conversion, and sugar metabolism, maintains myelin (nerve insulation), and regulates estrogen production. Progesterone maintains the uterine lining until one of two things happen: pregnancy or no pregnancy. If pregnancy occurs, progesterone production is taken over by the developing lining itself – the placenta. If no pregnancy occurs, the follicle stops producing progesterone, which triggers the collapse of the blood-rich lining that is the endometrium, which is then expelled as the woman's monthly flow.

The balance of estrogen and progesterone is very important in a woman's body. ³

HRT (Hormonal Replacement Therapy)

Hormone replacement therapy (HRT) is used to supplement the body with either estrogen alone or estrogen and progesterone in combination during and after menopause. Estrogen and progesterone are hormones that are produced by a woman's ovaries. When the ovaries no longer produce adequate amounts of these hormones (as in menopause), HRT can be given to supplement the body with adequate levels of estrogen and progesterone.

The side effects of HRT are often the same or worse than the original menopause symptoms they set out to cure.



Side effects of HRT are -increased risk of breast cancer, increased risk of endometrial cancer, osteoporosis, blood clots, high blood pressure, vastly increased rate of heart attack, skin reactions, hair loss, weight gain, fluid retention, bloating, vaginal bleeding, rash, acne, breast tenderness, depression, breast cancer, stroke, lupus. Its obvious that the side effects of HRT are same as the side effects of that of excess of synthetic estrogen. A balance of synthetic estrogen and synthetic progesterone should have overcome these side effects; however that is not the case. That is because HRT's synthetic progesterone is completely altered after going through the digestive system, when it gets to the liver. The liver changes it into three other metabolites. Any benefits are thus cancelled. The problems at menopause are not caused by lack of estrogen, but by lack of progesterone. Estrogen production drops 40% at menopause and progesterone drops to 0%. The body does not allow two of the three naturally occurring estrogens, estradiol and estrone, to hang around very long. It converts them into the non-carcinogenic estriol, as soon as possible. Such a helpful conversion cannot happen with synthetic estrogen because of the amounts involved. The carcinogenic forms remain increasing risk of cancer.⁴

Aromatherapy

Aromatherapy is the treatment or prevention of disease by use of essential oils. Other stated uses include pain and anxiety reduction, enhancement of energy and short-term memory, relaxation, hair loss prevention, and reduction of eczema-induced itching. Two basic mechanisms are offered to explain the purported effects. One is the influence of aroma on the brain, especially the limbic system through the olfactory system. The other is the direct pharmacological effects of the essential oils. When applied to the body, essential oils penetrate the skin via the hair follicles and sweat glands and are absorbed into the body fluids, where they not only help to kill bacteria and viruses but also stimulate the body's immune system, thereby strengthening resistance to further attack. Some essential oils increase the circulation and help with the efficient elimination of toxins, others promote new cell growth and encourage the body's natural ability to heal itself. Each essential oil has its own character and aroma, exhibiting a varying number of properties and benefits which are unique to itself, since no two essential oils are quite the same. The minute molecules of essential oils are readily absorbed into the bloodstream when they are inhaled as the lungs work to oxygenate the blood. This form of absorption is most efficient when inhaling essential oils from a tissue, diffusing them in a vaporizer, or adding them to your bathwater. The aroma sends a signal directly to the Limbic System in the brain which is the centre of emotions, memory and sexual arousal. This is why essential oils have such a powerful effect on our moods and general state of mind.⁵

Vata Menopause:⁶

Symptoms: emotional imbalance and irregular scanty periods, angelica (immune stimulating, reduce confusion); clarysage: rejuvenative, antidepressant, relieves intestinal and uterine cramping, aphrodisiac, rose-emmenagogue (regulates menstruation), rosewood-relaxant, basil: emmenagogue, nerve.

Table 1: Vata Menopause

VATA ⁷	
Fear, anxious, grounded	Angelica, lavender, clarysage, sandalwood, chamomile, rosewood
Weak	Angelica, basil, rosemary, cardamom, basil
Moody	Clarysage, rosewood, bergamot
Unfocussed	Basil, rose, rosemary, lemongrass
Absentminded	Basil, cypress, lemon, orange, rosemary
Sleepless	Basil, lavender, orange, rosemary

Pitta Menopause:⁸

Symptoms: emotional imbalance, extreme periods and hot flashes, lemon: astringent, lavender: calming, sedative, stimulant, yarrow: regulates menses, anti-inflammatory, Chamomile: emmenagogue, sedative.

Table 2: Pitta Menopause

PITTA ⁹	
Angry	Blue chamomile, rose, musk, saffron
Stubborn	Lavender, peppermint
Opinionated	Jasmine, yarrow
Hurtful	Oudmusk, yarrow, jasmine
Frustrated	Brahmi, goldchamomile

Kapha Menopause:¹⁰

Symptoms: breast tenderness, emotional imbalance, fibroids, tendency of fluid retention, cypress: uplifts the mind; clarysage: rejuvenative, antidepressant, stimulates the body during hot flashes, geranium: menopause hormone balancer.

Table 3: Kapha Menopause

KAPHA ¹¹	
Depressed	Lemongrass, clarysage, grapefruit, orange, cypress
Disinterested	Lavender, orange, bergamot
Greedy	Basil, rosemary, cardamom
Attached	Mint, ginger, myrtle
Resistant	Lime, chamomile, bergamot
Sad	Jasmine, rose, clarysage, rosewood

Essential oils and endocrine glands¹²

Oils stimulating ovaries: Yarrow (PK); Angelica (VK); Jasmine(VPK); Clarysage (VPK), Oils stimulating pituitary: Clarysage (VPK), Jasmine (VP), Yarrow (PK).



The herbs which contribute to minimize the symptoms of menopause are described as follows viz, their botanical sources and mechanisms of action are emphasized.

Lavender

Biological Source

Scientific Name(s): *Lavandula angustifolia* Mill. (syn. *Lavandula officinalis* Chaix.) *Lavandula stoechas* L, *Lavandula dentata*, *Lavandula latifolia* Medik, *Lavandula luisieri* (Rozeira) Rivas Mart., and *Lavandula pubescens* Decne.

Family: Lamiaceae (mints)

Botany

Lavender plants are aromatic evergreen sub-shrubs that grow to approximately 1 m high.¹³ The plants are native to the Mediterranean region, the Arabian peninsula, Russia, and Africa. Additionally, lavender is cultivated in the United States, the United Kingdom, southern Europe, and Australia¹⁴ The many species readily hybridize with each other. Fresh flowering tops are collected, and the essential oil is distilled or extracts are obtained by solvent extraction.¹³ The plant has small blue or purple flowers. The narrow leaves are fuzzy and gray when young and turn green as they mature.

Mechanism of action

Lavender is antidepressant oil that balances and normalizes the system regardless of condition. It's calming, uplifting and relaxing. It's even been known to lower blood pressure. Lavender is analgesic and used for relief of muscular aches and pains in menopause. While not causing a direct analgesic effect, inhalational lavender was found to be associated with less pain intensity and pain unpleasantness as noted by a patient report in a model of experimentally induced pain.¹⁵

Usage

Aromatherapy for a bath: 6 drops (120 mg) added to 20 L of bath water.^{17,18} Inhalational aromatherapy: 2 to 4 drops in 2 to 3 cups (480 to 720 mL) of boiling water or used in an aromatic diffuser and inhaled.

Yarrow

Biological source

Scientific Name(s): *Achillea millefolium* L.; Family: Asteraceae (daisies)

Common Name(s): Yarrow, thousand-leaf, mil foil, green arrow, wound wort, nosebleed plant

Botany

The name yarrow applies to any of roughly 80 species of daisy plants native to the North Temperate Zone. *A. millefolium* L. has finely divided leaves and whitish, pink, or reddish flowers. It can grow up to 3 feet in height. This hardy perennial weed blooms from June to November. Golden yarrow is *Eriophyllum confertiflorum*.^{19, 20}

Uses

Research reveals no clinical data regarding the use of yarrow to treat any condition. However, yarrow has been used to induce sweating and to stop wound bleeding. It has also been reported to reduce heavy menstrual bleeding and pain.

Yarrow helps regulate the menstrual cycle and reduces heavy bleeding and pain.^{20, 21}

Clarysage²²

Biological source

Clary sage essential oil is extracted from *Salvia sclarea* of the Labiatae family and is also known as clary, clary wort

Botany

It is a native to southern Europe and is a stout biennial herb that grows up to 1 meter (3 feet) tall with large, hairy leaves and small blue/ white flowers growing directly off the long, thin stem. It is cultivated for oil production in France and Russia.

Extraction

Clary sage oil is extracted by steam distillation from the flowering tops and the leaves.

Mechanism of action

Clary sage is calming to the nervous system, particularly in cases of depression, stress, insomnia and deep seated tension. It furthermore is a good tonic for the womb and female functions in general, such as painful periods, scanty menstruation and relaxation during labor, thus encouraging a less painful birth.

During menopause, clary sage oil can help reduce hot flushes, night sweats, palpitations, irritability, as well as headaches and dizziness.

Cypress²³

Biological source

Cypress essential oil is from *Cupressus sempervirens* of the Cupressaceae family and is also known as Italian or Mediterranean cypress

Botany

The tree is a perennial tree, conical-shaped, about 28 meters (80 feet) high and originated from the East, now mostly found in gardens and cemeteries in the Mediterranean region.

It is an evergreen tree with dark green foliage, small flowers and round brown-gray cones with seed nuts inside. The wood is hard and durable, red-yellow in color

Extraction

Cypress oil is extracted from the needles and twigs of young branches by steam distillation and yields 1.3 - 1.5 %.



Mechanism of action

Cypress oil has a calming and soothing effect on the irritable, angry and stressed-out person; cypress oil soothes muscular cramps, helps to regulate the menstrual cycle

CONCLUSION

Ayurveda is time tested Indian system of medicine which is known to mankind since Vedic period. Aromatherapy can play a pivotal role in curing premenstrual tension. Plant derived phytochemicals offers a huge potential as an effective remedy for alleviation and treatment of PMS and Menopausal symptoms thereby providing a better choice of treatment over conventional Hormonal Replacement Therapy (HRT) which is associated with osteoporosis, heart ailments, cancer etc. So by knowing one's doshas because of which different women have different symptoms of menopause & administering selective herbs by way of aromatherapy can be considered as a good option in such type of women's disorders Aromatherapy is the systematic use of volatile plant oils known as essential oils for the treatment or prevention of disease. It is a form of complementary therapy designed to treat the whole person and not just the symptom or disease by assisting the body's natural ability to balance, regulate, heal and maintain itself. These volatile essential oils consist of small aromatic molecules that are readily absorbed via the skin or by breathing they enter the lungs. These therapeutic constituents then enter the bloodstream and are carried around the body where their healing powers bring about their action. Since these essential oils are highly concentrated, only a small amount of oil is required to bring about a therapeutic effect. When using good quality essential oils correctly, the soothing combination of beautiful aromas, massage, aromatic baths and other treatments all work to regulate, balance, heal and maintain your entire being by working with nature, and not against it.

REFERENCES

1. <https://www.clinicalkey.com/topics/obstetrics-gynecology/menopause.html>
2. Gerard J. Tortora, Bryan Derrickson, Principles of anatomy and physiology, John Wiley and Sons publishers, 13th edition, volume 2, 1161.
3. Gerard J. Tortora, Bryan Derrickson, Principles of anatomy and physiology, John Wiley and Sons publishers, 13th edition, volume 2, 1161.
4. Kamen B, Hormone Replacement Therapy, Yes or No? 1996.
5. <http://www.quinessence.com/>
6. Dr Light Miller and Dr Bryan Miller: Ayurveda and aromatherapy-the earth essential guide to ancient wisdom and modern healing, Motilal Banarsidass publishers Delhi, Edition 1 Delhi 1998, reprint 2005. Pg 146-147
7. Dr Light Miller and Dr Bryan Miller: Ayurveda and aromatherapy-the earth essential guide to ancient wisdom and modern healing, Motilal Banarsidass publishers Delhi, Edition 1 Delhi 1998, reprint 2005, 167, 168.
8. Dr Light Miller and Dr Bryan Miller: Ayurveda and aromatherapy-the earth essential guide to ancient wisdom and modern healing, Motilal Banarsidass publishers Delhi, Edition 1 Delhi 1998, reprint 2005, 147-148.
9. Dr Light Miller, Dr Bryan Miller, Ayurveda and aromatherapy-the earth essential guide to ancient wisdom and modern healing, Motilal Banarsidass publishers Delhi, Edition 1 Delhi 1998, reprint 2005, 168-169.
10. Dr Light Miller, Dr Bryan Miller, Ayurveda and aromatherapy-the earth essential guide to ancient wisdom and modern healing, Motilal Banarsidass publishers Delhi, Edition 1 Delhi, 1998, reprint 2005, 148.
11. Dr Light Miller, Dr Bryan Miller: Ayurveda and aromatherapy-the earth essential guide to ancient wisdom and modern healing, Motilal Banarsidass publishers Delhi, Edition 1 Delhi 1998, reprint 2005, 169.
12. Dr Light Miller, Dr Bryan Miller, Ayurveda and aromatherapy-the earth essential guide to ancient wisdom and modern healing, Motilal Banarsidass publishers Delhi, Edition 1 Delhi 1998, reprint 2005, 162-163.
13. Leung AY, Encyclopedia of Common Natural Ingredients Used in Food, Drugs and Cosmetics, New York, NY: J Wiley and Sons, 1980.
14. Denner SS, Lavandula angustifolia Miller: English lavender. Holist Nurs Pract, 23(1), 2009, 57-64.
15. Gedney JJ, Glover TL, Fillingim RB, Sensory and affective pain discrimination after inhalation of essential oils, Psychosomatic Med, 66(4), 2004, 599-606.
16. Basch E, Foppa I, Liebowitz R, et al., Lavender (Lavandula angustifolia Miller), J Herb Pharmacother, 4(2), 2004, 63-78.
17. Lavandula angustifolia, In: van Wyk BE, Wink M, eds. Medicinal Plants of the World: An Illustrated Scientific Guide to Important Medicinal Plants and Their Uses, Portland, OR: Timber Press, 2004, 189.
18. Lavender flower, In: Blumenthal M, ed. The Complete German Commission E Monographs: Therapeutic Guide to Herbal Medicines, Austin, TX: American Botanical Council; 1998, 159-160.
19. Seymour ELD, The Garden Encyclopedia, Wise, 1936.
20. Chevallier A, Encyclopedia of Medicinal Plants, New York, NY: DK Publishing, 1996, 54.
21. Newall C, Herbal Medicines, London, England: Pharmaceutical Press, 1996, 271-277.
22. <http://www.essential oils.co.za/essential-oils/clary-sage.htm>
23. <http://www.essentialoils.co.za/essential-oils/cypress.htm>

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