



Essential Oil Studies For Women's Health

PMS

ISRN Obstet Gynecol. 2014; 2014: 792708.

Published online 2014 May 4. doi: [10.1155/2014/792708](https://doi.org/10.1155/2014/792708)

PMCID: PMC4040198

Effect of Treatment with Ginger on the Severity of Premenstrual Syndrome Symptoms

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Abstract

Premenstrual syndrome (PMS) is a common disorder. Although the etiology of PMS is not clear, to relieve from this syndrome different methods are recommended. One of them is use of medicinal herbs. This study was carried out to evaluate effects of ginger on severity of symptoms of PMS. This study was a clinical trial, double-blinded work, and participants were randomly allocated to intervention ($n = 35$) and control ($n = 35$) groups. To determine persons suffering from PMS, participants completed daily record scale questionnaire for two consecutive cycles. After identification, each participant received two ginger capsules daily from seven days before menstruation to three days after menstruation for three cycles and they recorded severity of the symptoms by daily record scale questionnaire. Data before intervention were compared with date 1, 2, and 3 months after intervention. Before intervention, there were no significant differences between the mean scores of PMS symptoms in the two groups, but after 1, 2, and 3 months of treatment, there was a significant difference between the two groups ($P < 0.0001$). Based on the results of this study, maybe ginger is effective in the reduction of severity of mood and physical and behavioral symptoms of PMS and we suggest ginger as treatment for PMS.

Complement Ther Med. 2015 Jun;23(3):318-24. doi: 10.1016/j.ctim.2015.04.001. Epub 2015 Apr 9.

Curcumin attenuates severity of premenstrual syndrome symptoms: A randomized, double-blind, placebo-controlled trial.

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Author information

Abstract

BACKGROUND:

Most women experience premenstrual syndrome (PMS) at their reproductive age. PMS is a combination of psychological, physical and behavioral changes that interfere with familial communication and social activities.

OBJECTIVES:

Different methods have been suggested for treating PMS and one of them is herbal medicine. This study was done to evaluate the effects of curcumin on severity of PMS symptoms.

METHODS:

This research was a clinical trial, double-blinded study. After having identified persons suffering from PMS, participants were randomly allocated to placebo (n=35) and curcumin (n=35) groups. Then each participant received two capsules daily for seven days before menstruation and for three days after menstruation for three successive cycles and they recorded severity of the symptoms by daily record questionnaire.

RESULTS:

The baseline level of PMS symptoms of before intervention did not differ between groups. While after three consecutive cycles treatment with curcumin, total severity of PMS score had reduced from 102.06 ± 39.64 to 42.47 ± 16.37 (mean change: 59.59; 95% confidence interval [CI]: 46.19-72.99) and in Placebo, total severity of PMS score changed from 106.06 ± 44.12 to 91.60 ± 43.56 (mean change: 14.45; 95% CI: 2.69 to 26.22). Furthermore, difference between mean changes was significant (mean difference: 45.14; 95% CI: 6.10-14.98).

CONCLUSIONS:

Our results for the first time showed a potential advantageous effect of curcumin in attenuating severity of PMS symptoms, which were probably mediated by modulation of neurotransmitters and anti-inflammatory effects of curcumin.

Biopsychosoc Med. 2013; 7: 12.

Published online 2013 May 31. doi: [10.1186/1751-0759-7-12](https://doi.org/10.1186/1751-0759-7-12)

PMCID: PMC3674979

Does lavender aromatherapy alleviate premenstrual emotional symptoms?: a randomized crossover trial

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Background

A majority of reproductive-age women experience a constellation of various symptoms in the premenstrual phase, commonly known as premenstrual syndrome (PMS). Despite its prevalence, however, no single treatment is universally recognized as effective, and many women turn to alternative approaches, including aromatherapy, a holistic mind and body treatment. The present study investigated the soothing effects of aromatherapy on premenstrual symptoms using lavender (*Lavandula angustifolia*), a relaxing essential oil, from the perspective of autonomic nervous system function.

Methods

Seventeen women (20.6 ± 0.2 years) with mild to moderate subjective premenstrual symptoms participated in a randomized crossover study. Subjects were examined on two separate occasions (aroma and control trials) in the late-luteal phases. Two kinds of aromatic stimulation (lavender and water as a control) were used. This experiment measured heart rate variability (HRV) reflecting autonomic nerve activity and the Profile of Mood States (POMS) as a psychological index before and after the aromatic stimulation.

Results

Only a 10-min inhalation of the lavender scent significantly increased the high frequency (HF) power reflecting parasympathetic nervous system activity in comparison with water (aroma effect: $F = 4.50$, $p = 0.050$; time effect: $F = 5.59$, $p = 0.017$; aroma x time effect: $F = 3.17$, $p = 0.047$). The rate of increase in HF power was greater at 10–15 min ($p = 0.051$) and 20–25 min ($p = 0.023$) in the lavender trial than in the control trial with water. In addition, POMS tests revealed that inhalation of the aromatic lavender oil significantly decreased two POMS subscales—depression–dejection ($p = 0.045$) and confusion ($p = 0.049$)—common premenstrual symptoms, in the late-luteal phase, as long as 35 min after the aroma stimulation.

Conclusions

The present study indicated that lavender aromatherapy as a potential therapeutic modality could alleviate premenstrual emotional symptoms, which, at least in part, is attributable to the improvement of parasympathetic nervous system activity. This study further implies that HRV could evaluate the efficacy of aromatherapy using various fragrances to relieve premenstrual symptoms, and ultimately, support the mind and body health of women.

Biopsychosoc Med. 2016 Apr 21;10:11. doi: 10.1186/s13030-016-0063-7. eCollection 2016.

Aromatic effects of a Japanese citrus fruit-yuzu (*Citrus junos* Sieb. ex Tanaka)-on psychoemotional states and autonomic nervous system activity during the menstrual cycle: a single-blind randomized controlled crossover study.

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BACKGROUND:

Yuzu (*Citrus junos* Sieb. ex Tanaka), a yellow-golden colored citrus fruit, has traditionally been used to promote psychosomatic health in Japan. While the yuzu produces a distinctive, pleasing aroma of citrus and floral, the efficacy of its fragrance remains unknown. The present study investigated the soothing effects of the fragrance of yuzu essential oil from the perspective of autonomic nervous system activity, which plays a crucial role in the integrity of the mind-body connection.

METHODS:

Twenty one women in their 20s participated in a single-blind randomized controlled crossover study. Subjects were examined twice each in the follicular and late-luteal phases. Two kinds of aromatic stimulation (yuzu and water as a control) were used. This experiment measured heart rate variability (HRV) reflecting autonomic nervous system activity and used the Profile of Mood States (POMS) as a psychological index before and after the aromatic stimulation.

RESULTS:

Only a 10-min inhalation of the yuzu scent significantly decreased heart rate and increased high frequency power of HRV reflecting parasympathetic nervous system activity, regardless of menstrual phase. This significant physiological effect continued for at least 25 min. In addition, the POMS tests revealed that inhalation of the aromatic yuzu oil significantly decreased total mood disturbance, a global measure of affective state, together with two POMS subscales-tension-anxiety and fatigue, as long as 35 min after the aroma stimulation, both in the symptomatic late-luteal and non-symptomatic follicular phases.

CONCLUSIONS:

The present study provides the novel information that yuzu's aromatic effects could serve to alleviate negative emotional stress, which, at least in part, would contribute to the improvement of parasympathetic nervous system activity.

Dysmenorrhea

J Obstet Gynaecol. 2015 May;35(4):382-5. doi: 10.3109/01443615.2014.958449. Epub 2014 Sep 25.

The effect of self-aromatherapy massage of the abdomen on the primary dysmenorrhoea.

Sadeghi Aval Shahr H¹, Saadat M, Kheirkhah M, Saadat E.

Abstract

Primary dysmenorrhoea (PD) is the most common gynaecological complaint that occurs in women. This study was a randomised controlled trial. The subjects were 75 students whose severity of pain was measured by visual analogue scale (VAS). Subjects were randomly divided into three groups: massage group with rose oil ($n = 25$) who applied self-massage with Rose damascene; a placebo group ($n = 25$) who performed self-massage with unscented almond oil and a no treatment control group ($n = 25$) who applied just self-massage. All three groups received the intervention in the first day of menstruation in two subsequent cycles. The severity of pain was self-reported by the students before and after intervention. All three groups were matched in demographic characteristics. The baseline pain reduced in the first cycle but this reduction was not significant in the groups ($p > 0.05$). In the second cycle, the menstrual pain was significantly lower in the rose oil group than in the other two groups after intervention (between massage with rose oil, almond oil $p = 0.003$ and massage with rose oil and just massage $p = 0.000$). Massage with aromatherapy reduces the severity of primary dysmenorrhoea, in comparison with massage therapy alone.

Evid Based Complement Alternat Med. 2012; 2012: 187163.

Published online 2011 Sep 22. doi: [10.1155/2012/187163](https://doi.org/10.1155/2012/187163)

PMCID: PMC3178179

Aromatherapy Massage on the Abdomen for Alleviating Menstrual Pain in High School Girls: A Preliminary Controlled Clinical Study

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Abstract

This study investigated the alleviating effects of aromatherapy massage and acetaminophen on menstrual pain in Korean high school girls. Subjects were divided into two groups: the aromatherapy massage (treatment) group ($n = 32$) and the acetaminophen (control) group ($n = 23$). Aromatherapy massage was performed on subjects in the treatment group. The abdomen was massaged once using clary sage, marjoram, cinnamon, ginger, and geranium in a base of almond oil. The level of menstrual pain was assessed using a visual analogue scale at baseline and twenty-four hours afterward. The reduction of menstrual pain was significantly higher in the aromatherapy group than in the acetaminophen group. Using multiple regression, aromatherapy massage was found to be more highly associated with reduction in the level of menstrual pain than acetaminophen. These findings suggest that aromatherapy massage may be an effective treatment for menstrual pain in high school girls.

However, it could not be verified whether the positive effects derived from the aromatherapy, the massage, or both. Further rigorous studies should be conducted using more objective measures.

Iran Red Crescent Med J. 2015 Apr; 17(4): e27032.

Published online 2015 Apr 22. doi: [10.5812/ircmj.17\(4\)2015.27032](https://doi.org/10.5812/ircmj.17(4)2015.27032)

PMCID: PMC4443385

The Effect of Cinnamon on Menstrual Bleeding and Systemic Symptoms With Primary Dysmenorrhea

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Abstract

Background:

Primary dysmenorrhea with interferes in daily activities can have adverse effects on quality of life of women.

Objectives:

Regarding the use of herbal medicine, the aim of this study was to assess the effect of cinnamon on primary dysmenorrhea in a sample of Iranian female college students from Ilam University of Medical Sciences (west of Iran) during 2013-2014.

Patients and Methods:

In a randomized double-blind trial, 76 female student received placebo (n = 38, capsules containing starch, three times a day (TDS)) or cinnamon (n = 38, capsules containing 420 mg cinnamon, TDS) in 24 hours. Visual analogue scale (VAS) was used to determine the severity of pain and nausea. Vomiting and menstrual bleeding were assessed by counting the number of saturated pads. The parameters were recorded in the group during the first 72 hours of the cycle.

Results:

The mean amount of menstrual bleeding in the cinnamon group was significantly lower than the placebo group ($P < 0.05$ and $P < 0.001$, respectively). The mean pain severity score in the cinnamon group was less than the placebo group at various intervals (4.1 ± 0.5 vs. 6.1 ± 0.4 at 24 hours, 3.2 ± 0.6 vs. 6.1 ± 0.4 at 48 hours, and 1.8 ± 0.4 vs. 4.0 ± 0.3 at 72 hours, respectively) ($P < 0.001$). The mean severity of nausea and the frequencies of vomiting significantly decreased in the cinnamon group compared with the placebo group at various intervals ($P < 0.001$, $P < 0.05$).

Conclusions:

Regarding the significant effect of cinnamon on reduction of pain, menstrual bleeding, nausea and vomiting with primary dysmenorrhea without side effects, it can be regarded as a safe and effective treatment for dysmenorrhea in young women.

J Obstet Gynaecol Res. 2012 May;38(5):817-22. doi:
10.1111/j.1447-0756.2011.01802.x. Epub 2012 Mar 22.

Pain relief assessment by aromatic essential oil massage on outpatients with primary dysmenorrhea: a randomized, double-blind clinical trial.

Ou MC¹, Hsu TE, Lai AC, Lin YT, Lin CC.

Abstract

AIM:

This study assessed the effectiveness of blended essential oils on menstrual cramps for outpatients with primary dysmenorrhea and explored the analgesic ingredients in the essential oils.

MATERIAL AND METHODS:

A randomized, double-blind clinical trial was conducted. Forty-eight outpatients were diagnosed with primary dysmenorrhea by a gynecologist and had 10-point numeric rating scales that were more than 5. The patients were randomly assigned to an essential oil group (n = 24) and a synthetic fragrance group (n = 24). Essential oils blended with lavender (*Lavandula officinalis*), clary sage (*Salvia sclarea*) and marjoram (*Origanum majorana*) in a 2:1:1 ratio was diluted in unscented cream at 3% concentration for the essential oil group. All outpatients used the cream daily to massage their lower abdomen from the end of the last menstruation continuing to the beginning of the next menstruation.

RESULTS:

Both the numeric rating scale and the verbal rating scale significantly decreased ($P < 0.001$) after one menstrual cycle intervention in the two groups. The duration of pain was significantly reduced from 2.4 to 1.8 days after aromatherapy intervention in the essential oil group.

CONCLUSION:

Aromatic oil massage provided relief for outpatients with primary dysmenorrhea and reduced the duration of menstrual pain in the essential oil group. The blended essential oils contain four key analgesic components that amount to as much as 79.29%; these analgesic constituents are linalyl acetate, linalool, eucalyptol, and β -caryophyllene. This study suggests that this blended formula can serve as a reference for alternative and complementary medicine on primary dysmenorrhea.

Evid Based Complement Alternat Med. 2013; 2013: 742421.

Published online 2013 Apr 11. doi: [10.1155/2013/742421](https://doi.org/10.1155/2013/742421)

PMCID: PMC3638625

The Effect of Aromatherapy Abdominal Massage on Alleviating Menstrual Pain in Nursing Students: A Prospective Randomized Cross-Over Study

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Abstract

Dysmenorrhea is a common cause of sickness absenteeism from both classes and work. This study investigated the effect of aromatherapy massage on a group of nursing students who are suffering of primary dysmenorrhea. A randomized blind clinical trial of crossover design was used. In the first treatment phase, group 1 ($n = 48$) received aromatherapy abdominal massage once daily for seven days prior to menstruation using the essential oils (cinnamon, clove, rose, and lavender in a base of almond oil). Group 2 ($n = 47$) received the same intervention but with placebo oil (almond oil). In the second treatment phase, the two groups switched to alternate regimen. Level and duration of pain and the amount of menstrual bleeding were evaluated at the baseline and after each treatment phase. During both treatment phases, the level and duration of menstrual pain and the amount of menstrual bleeding were significantly lower in the aromatherapy group than in the placebo group. These results suggests that aromatherapy is effective in alleviating menstrual pain, its duration and excessive menstrual bleeding. Aromatherapy can be provided as a nonpharmacological pain relief measure and as a part of nursing care given to girls suffering of dysmenorrhea, or excessive menstrual bleeding.

Iran J Nurs Midwifery Res. 2015 Jan-Feb; 20(1): 156–160.

PMCID: PMC4325408

The effect of aromatherapy massage with lavender oil on severity of primary dysmenorrhea in Arsanjan students

Froozan Bakhtshirin,¹ Sara Abedi,¹ Parisa YusefiZoj,² and Damoon Razmjooee³

Abstract

Background:

Presently, using complementary therapy such as lavender oil has specific application in medicine. The purpose of this study was to investigate the effect of aromatherapy massage on the severity of primary dysmenorrhea in nursing and midwifery students of Islamic Azad University of Arsanjan, Iran.

Materials and Methods:

This study was performed using clinical trial method on 80 eligible students whose level of pain was measured by visual analogue scale (VAS) before the intervention. Each participant, in the first days of menstruation, randomly received two types of massage with lavender and placebo oil in two consecutive cycles of menstruation. Their level of pain was measured before and 30 min after the intervention. In this study, each group was considered as their self-control group in the next cycle. The data were analyzed by SPSS software.

Results:

A significant decrease in VAS score after lavender massage was detected in comparison with placebo massage. There was a statistically significant difference between VAS scores after and before placebo massage. In addition, statistically the effect of lavender massage on the severity of primary dysmenorrhea was higher than that of placebo massage ($P < 0.001$).

Conclusions:

Findings of this study showed that lavender oil massage decreases primary dysmenorrhea and it can be used as an effective herbal drug.

Menopause

Evid Based Complement Alternat Med. 2014; 2014: 796518.

Published online 2014 Jun 12. doi: [10.1155/2014/796518](https://doi.org/10.1155/2014/796518)

PMCID: PMC4082953

Effects of Inhalation of Essential Oil of *Citrus aurantium* L. var. *amara* on Menopausal Symptoms, Stress, and Estrogen in Postmenopausal Women: A Randomized Controlled Trial

Seo Yeon Choi, Purum Kang, Hui Su Lee, and Geun Hee Seol*

Abstract

This study aimed to investigate the effects of inhalation of the essential oil of *Citrus aurantium* L. var. *amara* (neroli oil) on menopausal symptoms, stress, and estrogen in postmenopausal women. Sixty-three healthy postmenopausal women were randomized to inhale 0.1% or 0.5% neroli oil or almond oil (control) for 5 minutes twice daily for 5 days. Menopause-related symptoms, as determined by the Menopause-Specific Quality of Life Questionnaire (MENQOL); sexual desire visual analog scale (VAS); serum cortisol and estrogen concentrations, blood pressure, pulse, and stress VAS, were measured before and after inhalation. Compared with the control group, the two neroli oil groups showed significant improvements in the physical domain score of the MENQOL and in sexual desire. Systolic blood pressure was significantly lower in the group inhaling 0.5% neroli oil than in the control group. Compared with the control group, the two neroli oil groups showed significantly lower diastolic blood pressure and tended to improve pulse rate and serum cortisol and estrogen concentrations. These findings indicate that inhalation of neroli oil helps relieve menopausal symptoms, increase sexual desire, and reduce blood pressure in postmenopausal women. Neroli oil may have potential as an effective intervention to reduce stress and improve the endocrine system.

Evid Based Complement Alternat Med. 2008 Sep; 5(3): 325–328.

Published online 2007 Apr 23. doi: [10.1093/ecam/nem027](https://doi.org/10.1093/ecam/nem027)

PMCID: PMC2529395

Aromatherapy Massage Affects Menopausal Symptoms in Korean Climacteric Women: A Pilot-Controlled Clinical Trial

Myung-Haeng Hur,¹ Yun Seok Yang,² and Myeong Soo Lee³

Abstract

This study investigated the effects of aromatherapy massage on menopausal symptoms in Korean climacteric women. Kupperman's menopausal index was used to compare an experimental group of 25 climacteric women with a wait-listed control group of 27 climacteric women. Aromatherapy was applied topically to subjects in the experimental group in the form of massage on the abdomen, back and arms using lavender, rose geranium, rose and jasmine in almond and primrose oils once a week for 8 weeks (eight times in total). The experimental group reported a significantly lower total menopausal index than wait-listed controls ($P < 0.05$). There were also significant intergroup differences in subcategories such as vasomotor, melancholia, arthralgia and myalgia (all $P < 0.05$). These findings suggest that aromatherapy massage may be an effective treatment of menopausal symptoms such as hot flushes, depression and pain in climacteric women. However, it could not be verified whether the positive effects were from the aromatherapy, the massage or both. Further rigorous studies should be done with more objective measures.

Insomnia and blood pressure

Evid Based Complement Alternat Med. 2013; 2013: 403251.

Published online 2013 Jan 30. doi: [10.1155/2013/403251](https://doi.org/10.1155/2013/403251)

PMCID: PMC3570933

Effects of Aroma Massage on Home Blood Pressure, Ambulatory Blood Pressure, and Sleep Quality in Middle-Aged Women with Hypertension

Myeong-Sook Ju,¹ Sahng Lee,² Ikyul Bae,³ Myung-Haeng Hur,^{4,*} Kayeon Seong,⁴ and Myeong Soo Lee⁵

Abstract

The purpose of this study was to evaluate the effects of aroma massage applied to middle-aged women with hypertension. The research study had a nonequivalent control group, nonsynchronized design to investigate the effect on home blood pressure (BP), ambulatory BP, and sleep. The hypertensive patients were allocated into the aroma massage group ($n = 28$), the placebo group ($n = 28$), and the no-treatment control group ($n = 27$). To evaluate the effects of aroma massage, the experimental group received a massage with essential oils prescribed by an aromatherapist once a week and body

cream once a day. The placebo group received a massage using artificial fragrance oil once a week and body cream once a day. BP, pulse rate, sleep conditions, and 24-hour ambulatory BP were monitored before and after the experiment. There was a significant difference in home systolic blood pressure (SBP) ($F = 6.71$, $P = 0.002$) between groups after intervention. There was also a significant difference in SBP ($F = 13.34$, $P = 0.001$) and diastolic blood pressure (DBP) ($F = 8.46$, $P = 0.005$) in the laboratory between aroma massage and placebo groups. In sleep quality, there was a significant difference between groups ($F = 6.75$, $P = 0.002$). In conclusion, aroma massage may help improve patient quality of life and maintain health as a nursing intervention in daily life.

Evid Based Complement Alternat Med. 2012; 2012: 740813.

Published online 2011 Aug 18. doi: [10.1155/2012/740813](https://doi.org/10.1155/2012/740813)

PMCID: PMC3159017

The Effect of Lavender Aromatherapy on Autonomic Nervous System in Midlife Women with Insomnia

Li-Wei Chien,^{1,2}, Su Li Cheng,³ and Chi Feng Liu^{4,*}

Abstract

The objective of this study is to determine the effects of 12 weeks of lavender aromatherapy on self-reported sleep and heart rate variability (HRV) in the midlife women with insomnia. Sixty-seven women aged 45–55 years, with a CPSQI (Chinese version of Pittsburgh Sleep Quality Index) greater than 5, were recruited from communities in Taiwan. The experimental group ($n = 34$) received lavender inhalation, 20 min each time, twice per week, for 12 weeks, with a total of 24 times. The control group ($n = 33$) received health education program for sleep hygiene with no intervention. The study of HRV was analyzed by time- and frequency-domain methods. Significant decrease in mean heart rate (HR) and increases in SDNN (standard deviation of the normal-to-normal (NN) intervals), RMSDD (square root of the mean squared differences of successive NN intervals), and HF (high frequency) of spectral powers analysis after lavender inhalation were observed in the 4th and 12th weeks of aromatherapy. The total CPSQI score of study subjects was significantly decreased in the experimental group ($P < 0.001$), while no significant difference was observed across the same time period ($P = 0.776$) in the control group. Resting HR and HRV measurements at baseline 1 month and 3 months after allocation showed no significant difference between the experimental and control groups. The study demonstrated that lavender inhalation may have a persistent short-term effect on HRV with an increase in parasympathetic modulation. Women receiving aromatherapy experienced a significant improvement in sleep quality after intervention. However, lavender aromatherapy does not appear to confer benefit on HRV in the long-term followup.

Comparison of lavender and clary sage

J Altern Complement Med. 2013 Jul; 19(7): 664–670.

doi: [10.1089/acm.2012.0148](https://doi.org/10.1089/acm.2012.0148)

PMCID: PMC3700459

Randomized Controlled Trial for *Salvia sclarea* or *Lavandula angustifolia*: Differential Effects on Blood Pressure in Female Patients with Urinary Incontinence Undergoing Urodynamic Examination

Geun Hee Seol, PhD, ¹ Yun Hee Lee, MS,¹ Purum Kang, BS,¹ Ji Hye You, MS,¹ Mira Park, PhD,² and Sun Seek Min, PhD³

Abstract

Objectives

The aim of this study was to investigate the effect of inhalation of *Salvia sclarea* (clary sage; clary) or *Lavandula angustifolia* (lavender) essential oil vapors on autonomic nervous system activity in female patients with urinary incontinence undergoing urodynamic assessment.

Study design, location, and subjects

This study was a double-blind, randomized, controlled trial carried out in 34 female patients with urinary incontinence.

Outcome measure

The subjects were randomized to inhale lavender, clary, or almond (control) oil at concentrations of 5% (vol/vol) each. Systolic blood pressure, diastolic blood pressure, pulse rate, respiratory rate, and salivary cortisol were measured before and after inhalation of these odors for 60 minutes.

Results

The clary oil group experienced a significant decrease in systolic blood pressure compared with the control ($p=0.048$) and lavender oil ($p=0.026$) groups, a significant decrease in diastolic blood pressure compared with the lavender oil group ($p=0.034$) and a significant decrease in respiratory rate compared with the control group ($p<0.001$). In contrast, the lavender oil group tended to increase systolic and diastolic blood pressure compared with the control group. Compared with the control group, inhalation of lavender oil ($p=0.045$) and clary oil ($p<0.001$) resulted in statistically significant reductions in respiratory rate.

Conclusions

These results suggest that lavender oil inhalation may be inappropriate in lowering stress during urodynamic examinations, despite its antistress effects, while clary oil

inhalation may be useful in inducing relaxation in female urinary incontinence patients undergoing urodynamic assessments.

Restless Leg Syndrome

Nurs Midwifery Stud. 2015 Dec; 4(4): e29617.

Published online 2015 Dec 1. doi: [10.17795/nmsjournal29617](https://doi.org/10.17795/nmsjournal29617)

PMCID: PMC4733501

The Effect of Massage With Lavender Oil on Restless Leg Syndrome in Hemodialysis Patients: A Randomized Controlled Trial

Sayyed Hossein Hashemi,¹ Ali Hajbagheri,² and Mohammad Aghajani^{3,*}

Abstract

Background:

Restless leg syndrome (RLS) is a common problem in patients with chronic renal failure. It can reduce the quality of life and sleep disturbances. This disorder is usually treated pharmacologically. Recently, complementary medicine methods have been suggested because of chemical drugs adverse effects. There is not enough evidence about the effect of aromatherapy on RLS.

Objectives:

The aim of this study was to determine the effects of massage with lavender oil on RLS symptoms in hemodialysis patients.

Patients and Methods:

This randomized clinical trial study included 70 hemodialysis patients with RLS that were randomly assigned into two groups in 2014. The experimental group received effleurage massage using lavender oil and control group received routine care for three weeks. Data was collected with RLS questionnaire and analyzed using independent and paired t-test and Chi-square test.

Results:

The mean RLS scores were not significantly different in the two groups at the start of study (22.41 ± 7.67 vs. 22.90 ± 4.38 , $P = 0.76$). At the end of study, the mean RLS score significantly decreased in the intervention group, while this score remained relatively un-changed in the control group (12.41 ± 5.49 vs. 23.23 ± 4.52 , $P < 0.0001$).

Conclusions:

Lavender oil massage was effective to improve RLS in hemodialysis patients. It has no adverse effects, is practical and cost-effective. It is suggested to be used along with routine treatment of RLS in hemodialysis patients.