

The Effect of Vitagnus on Menopausal Symptoms

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Abstract

Background: It seems that some herbal medicines such as sage or vitagnus traditionally used as treatment agents are effective on menopausal symptoms such as hot flashes; therefore, the current study aimed at assessing the effect of vitagnus on menopausal symptoms.

Methods: The current study was a prospective clinical trial conducted on 100 menopausal patients divided into 3 groups. In each group, hot flash was treated with vitagnus, sage, or placebo pills and patients were followed-up at the days 15 and 30 after the treatment. The data were analyzed by descriptive (percentage, mean, and standard deviation) and inferential (chi-square, t-test, McNamara, repeated ANOVA) statistics with SPSS software, version 21 (IBM SPSS, Armonk, NY, USA).

Results: Average of hot flash in vitagnus group was 55.19 ± 14.53 ; it was also 60.26 ± 14.44 and 60.73 ± 12.30 in the sage and control groups. According to the Cooperman questionnaire score, comparison of hot flash data showed no significant difference between the groups before treatment (the Cooperman questionnaire score < 14) ($P = 0.894$), (15 - 20) ($P = 0.262$), (21 - 35) ($P = 0.800$), (35 < the Cooperman questionnaire score) ($P = 0.867$). The current study analysis showed no significant difference between the groups in the severity of menopause symptoms at 15-day follow-up (the Cooperman questionnaire score < 14) ($P = 0.477$), (the Cooperman's questionnaire score 15 to 20) ($P = 0.620$), (the Cooperman questionnaire score 21 to 35) ($P = 0.243$), (35 < the Cooperman questionnaire score) ($P = 0.278$). But, the severity of menopause symptoms at 30-day follow-up showed significant differences between the groups, except between 15 - 20 and 21 - 35 scores (the Cooperman questionnaire score < 14) ($P = 0.306$), (15 - 20) ($P = 0.005$), (21 - 35) ($P = 0.007$), (35 < the Cooperman questionnaire score) ($P = 0.785$).

Conclusions: The results of the current study showed that vitagnus and sage were effective on the reduction of menopausal symptoms in postmenopausal females. The effect of placebo on the improvement of menopausal symptoms was significant and it is recommended to be used as an agent to reduce the psychological outcomes of menopause.

Keywords: Vitagnus, Sage, Menopause

1. Background

Menopause, cessation of regular hormonal cycles, is a period in females' life that associates with hot flashes, insomnia, and decreased quality of life (1-3). The prevalence of some of these complications, such as hot flashes, is reported about 60% in menopause, which occurs in the age range of 52 to 54 years (4-8). During menopause, ovarian secretion of estrogen and progesterone slows down. Eventually, lack of these hormones makes some changes in endocrine function of menopause (1, 2, 9-13).

About 10% to 25% of menopausal females experience severe symptoms and look for a remedy to relieve the symptoms. The usual treatment approach is hormone replacement therapy (HRT), which replaces the decreased estrogen and progesterone. However, this treatment mode

is associated with several complications. Therefore, some menopausal females reject this treatment approach (9, 14, 15).

To address such complications, herbal medicine is an important and safe alternative. One useful example might be vitagnus (Chester Berry) used by medieval monks in Greece. Vitagnus (*Vitex agnus castus*) is known as a phytoestrogenic herb. Some studies showed that vitagnus could decrease menopausal symptoms. It can stimulate dopamine D2 receptors and decrease prolactin production and secretion. Moreover, vitagnus can act as an antagonist on opioid receptors in vitro. Some clinical studies showed that the amounts of luteinizing hormone (LH) and follicle-stimulating hormone (FSH) did not change following the consumption of vitagnus extract, which maintained progesterone level (4, 6, 16, 17). In addition, vitagnus toxicity

was not reported in the literature.

Therefore, vitagnus might be useful to treat menopause symptoms.

The current clinical trial aimed at assessing the effect of vitagnus on the decrease of menopausal symptoms.

2. Methods

The current double-blind, randomized, clinical trial was conducted on menopausal females without any pre-existing illnesses that mimic hot flash. In the current study, a total of 100 menopausal females aged 45 to 55 years with hot flash referred to the gynecology clinic of Ziaeiian hospital, Tehran University of Medical Sciences, from 2015 to 2016. All of the subjects signed the informed consent forms. A questionnaire was used to collect demographic data. Data regarding the age at menopause and frequency and duration of hot flashes in every 24 hours were gathered by interview. Also, the Cooperman questionnaire (4), a standard questionnaire with high reliability and validity, was used to evaluate the severity of hot flashes.

Then, the subjects were randomly divided into 3 groups of vitagnus, sage, and placebo. On the days 15 and 30 after the treatment, the subjects were followed-up.

The data were shown as percentage and mean (standard deviation) and analyzed using chi-square, t-test, the McNemar, and repeated ANOVA tests. The SPSS software, version 21 (IBM SPSS, Armonk, NY, USA) was used to analyze data.

3. Results

The current study followed-up 100 menopausal females. In the vitagnus group ($n = 36$), the mean age was 49.7 ± 7.1 years; ranged 35 to 69. In the sage group ($n = 31$), the mean age was 48.5 ± 5.6 years; ranged 35 to 64. In the placebo group ($n = 33$), the mean age was 52.2 ± 6.7 years; ranged 39 to 73. No significant difference was observed in age range among the study groups ($P = 0.194$). Table 1 shows the weight, menopause duration, and frequency of hot flash in the study groups before intervention.

The current study analysis showed no significant difference among the groups in the severity of menopause symptoms 15 days after the treatment (the Cooperman questionnaire score < 14) ($P = 0.477$), (the Cooperman questionnaire score 15 to 20) ($P = 0.620$), (the Cooperman questionnaire score 21 to 35) ($P = 0.243$), ($35 <$ the Cooperman questionnaire score) ($P = 0.278$). The severity of menopause symptoms showed significant difference among the groups on the day 30 after the treatment, except between 15 - 20 and 21 - 35 (the Cooperman questionnaire score < 14) ($P = 0.306$), (15 - 20) ($P = 0.005$), (21 - 35)

($P = 0.007$), ($35 <$ the Cooperman questionnaire score) ($P = 0.785$).

4. Discussion

In postmenopausal females, hot flash is the most common symptom that affects the quality of life. Some studies showed that vitagnus could decrease hot flash during and after the menopause (4-8, 18, 19). The current study aimed at evaluating the effect of vitagnus extract on the reduction of hot flash in a population of Iranian postmenopausal females 15 and 30 days after the treatment.

In the current study, vitagnus could reduce the severity of hot flash on the day 30 after the treatment. A study by Sakhavar et al., showed that vitagnus could weaken the severity of hot flash on the days 15 and 30 after the treatment (4). Also, in another study by Chopin, vitagnus showed similar results (20).

In the current study, placebo and sage reduced hot flashes in menopausal females. Likewise, some researches showed that a good response might be observed with placebo in the treatment of treatment menopause symptoms (4, 7, 21). In another study, vitagnus affected hot flash in 21.92% of 180 menopausal females (18).

Moreover, the result of the current study showed that vitagnus and sage might be effective drugs on postmenopausal symptoms. The placebo effect was also significant on the improvement of menopausal symptoms and it is recommended to be used as an agent to reduce psychological outcomes of menopause. Although both vitagnus and sage extracts could reduce hot flashes in the menopausal females, the effect of vitagnus was higher.

Bommer et al., demonstrated that hot flushes significantly decreased following the consumption of vitagnus (from 46% to 100% over 8 weeks) (22).

To evaluate the efficiency of vitagnus on decreasing hot flashes in menopausal females, future studies with greater sample sizes and more rigorous methods are recommended.

Footnote

Conflict of Interest: Authors declared no conflict of interests.

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Table 1. Demographic Variable in the Study Groups Before Intervention

Demographic Variable	Vitagnus	Sage	Placebo	P Value
Weight	71.49 ± 9.62	72.06 ± 12.01	69.55 ± 11.82	> 0.05
Menopause duration/ months	37.37 ± 14.89	33.32 ± 14.54	35.52 ± 14.25	> 0.05
Hot Flash	57.19 ± 14.53	60.26 ± 12.44	60.73 ± 12.30	> 0.05

Table 2. Comparison of the Cooperman Questionnaire Scores Among the Study Groups^a

		The Cooperman Questionnaire Score at First Day			
		1 - 14 Rarely Occurring Symptoms	15 - 20 Mild Symptoms	21 - 35 Moderate Symptoms	> 35 Severe Symptoms
Before treatment	Vitagnus	3 (8.33)	3 (8.33)	19 (52.78)	11 (30.56)
	Sage	1 (3.23)	5 (16.13)	14 (45.16)	11 (35.48)
	Placebo	0 (0.00)	2 (6.06)	21 (63.64)	10 (30.30)
On the day 15 after treatment	Vitagnus	7 (19.44)	7 (19.44)	18 (50.00)	4 (11.11)
	Sage	6 (19.35)	4 (12.90)	18 (58.06)	3 (9.68)
	Placebo	9 (27.27)	2 (6.06)	17 (51.52)	5 (15.15)
On the day 30 after treatment	Vitagnus	12 (33.33)	13 (36.11)	8 (22.22)	3 (8.33)
	Sage	12 (38.71)	7 (22.58)	11 (35.48)	1 (3.23)
	Placebo	11 (33.33)	3 (9.09)	15 (45.45)	4 (12.12)

^aValues are expressed as No. (% within drug).

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