

Original Paper

## Effect of *red clover* Isoflavones extract on menopausal symptoms

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### Abstract

**Background and Objective:** Menopausal symptoms influence mental, physical and emotional health, as well as social performance and family relationships. Due to the undesirable side effects of alternated hormone-therapy, tendency toward alternative treatments in relieving these symptoms have been increased, and the use of herbs like phytoestrogens seem preferable. This study was conducted to determine the effect of *red clover* Isoflavones extract on menopausal symptoms.

**Materials and Methods:** This clinical randomized, triple-blind trial was conducted on 72 menopausal women who referred to Navab Safavi health care center, Isfahan, Iran during Oct-Apr 2011. After two weeks of monitoring and determination of the baseline symptoms score including hot flushes and sweating, paresthesia, insomnia, nervousness, depression, vertigo, weakness and fatigue, arthralgia and myalgia, headache, palpitation and formication, the women were randomly divided into two groups of 36 subjects: placebo and intervention (taking 45 mg of *red clover* Isoflavones extract capsules). The subjects were given one capsule daily for eight weeks and menopausal symptoms were recorded weekly. Data were analyzed using SPSS-18, independent t-test, ANOVA, chi-square and Mann-Whitney tests.

**Results:** 55 women completed the study: 27 subjects in the placebo and 28 in the intervention group. The mean age of subjects in placebo and intervention group was  $53.92 \pm 3.21$  and  $52.96 \pm 3.07$  years, respectively. The mean age of menopause in the placebo and intervention groups was  $51.38 \pm 2.63$  and  $50.05 \pm 1.17$  years, respectively. The mean elapsed time since menopause was determined as  $2.69 \pm 1.47$  years in placebo and  $2.66 \pm 1.65$  years in intervention group. The average score of menopausal symptoms at the end of the 10<sup>th</sup> week was  $13.87 \pm 7.22$  and  $16.44 \pm 11.59$  in intervention and placebo groups, this reduction was significant ( $P < 0.05$ ).

**Conclusion:** This study showed that consumption of capsules containing *red clover* Isoflavones extract for 8 weeks, reduces menopausal symptoms in postmenopausal women.

**Keywords:** Isoflavones, Menopausal symptoms, Phytoestrogens, *Red clover*

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