

## Effects of Valeriana Officinalis on the Severity of Dysmenorrheal Symptoms

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### Abstract

**Introduction:** Primary dysmenorrhea refers to painful cramps during menstruation with no organic origin. Regarding the high prevalence of dysmenorrhea and its adverse effects on the quality of life of sufferers and the evidence on sedative and antispasmodic properties of Valerian officinalis on smooth muscles, this double-blind clinical trial was conducted to determine the effects of the herb on the severity of dysmenorrheal symptoms in Zanjan Islamic Azad University students during 2009.

**Materials & Methods:** The subjects included 100 students who were matched for dysmenorrheal severity, age, menarche onset, body mass index (BMI), duration, interval and amount of bleeding as well as occupation and educational achievements of their parents. The subjects were randomly divided into experimental (49 subjects) and control (51 subjects) groups. The experimental group took 255mg capsules of the herb, three times a day for three days at the onset of menses while the controls similarly took placebo (capsules containing starch). Pain severity was evaluated by a visual analogue scale (0 to 10cm) and systemic manifestations by a multidimensional verbal scale before and during two consecutive menstrual cycles. The severity and duration of symptoms were analyzed and compared between the two groups.

**Results:** There were no significant differences in pain severity between the two groups before the intervention. However, pain severity was reduced in both groups after the intervention ( $p<0.001$ ) with significantly more relieving results in the experimental group ( $p<0.05$ ). In addition, the total scores for systemic manifestations associated with dysmenorrhea, insignificantly decreased in both groups, except occurrence of syncope ( $p<0.05$ ).

**Conclusion:** Valeriana officinalis decreased dysmenorrheal symptoms, which it might be attributed to its antispasmodic effects. Further studies are warranted for the use of Valerian officinalis in decreasing dysmenorrheal symptoms.

**Keywords:** Dysmenorrheal pain, Primary dysmenorrhea, Spasm, Valeriana officinalis, Visual analogue pain scale.

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