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## ۴۰ درصد تخفیف نوروزی ویژه کارگاهها و فیلم های آموزشی



اصول تنظیم قراردادها



پروپوزال نویسی



آموزش مهارت های کاربردی در تدوین و چاپ مقاله

## Herbal Medicine in the Treatment of Primary Dysmenorrhea

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### Abstract

Dysmenorrhea is called "primary" when there is no specific abnormality and "secondary" when the pain is caused by an underlying gynecological problem. It is believed that primary dysmenorrhea occurs when hormone-like substances called "prostaglandins" produced by uterine tissue trigger strong muscle contractions in the uterus during menstruation. However, the level of prostaglandins does not seem to have anything to do with how strong a woman's cramps are. Some women have high levels of prostaglandins and no cramps, whereas other women with low levels have severe cramps. This is why experts assume that cramps must also be related to other things (such as genetics, stress, and different body types) in addition to prostaglandins. Secondary dysmenorrhea may be caused by endometriosis, fibroid tumors, or an infection in the pelvis. In this article we focus on herbal medicine in the treatment of primary dysmenorrhea.

**Keywords:** Herbal Medicine, NSAIDs, Primary dysmenorrhea



## Introduction

Dysmenorrhea refers to the symptom of painful menstruation. It can be divided into 2 broad categories: primary (occurring in the absence of pelvic pathology) and secondary (resulting from identifiable organic diseases) [1]. Primary dysmenorrhea is common menstrual cramps that are recurrent (come back) and are not due to other diseases. Pain usually begins 1 or 2 days before, or when menstrual bleeding starts, and is felt in the lower abdomen, back, or thighs. Pain can range from mild to severe, can typically last 12 to 72 hours, and can be accompanied by nausea, vomiting, fatigue, and even diarrhea [2-4]. Common menstrual cramps usually become less painful as a woman ages and may stop entirely if the woman has a baby. Secondary dysmenorrhea is pain that is caused by a disorder in the woman's reproductive organs, such as endometriosis, adenomyosis, uterine fibroids, or infection. Pain from secondary dysmenorrhea usually begins earlier in the menstrual cycle and lasts longer than common menstrual cramps. The pain is not typically accompanied by nausea, vomiting, fatigue, or diarrhea. Some of the risk factors for primary dysmenorrhea include an early onset of menstrual periods (before the age of 12), heavy or prolonged menstrual flow, a prior family history of dysmenorrhea, obesity, or a history of smoking [5, 6]. The risk factors for secondary dysmenorrhea include the presence of fibroid tumors, pelvic inflammatory disease, tubo-ovarian abscesses, endometriosis, IUD, or ovarian torsion. Primary dysmenorrhea can affect up to 50 percent of all women who have menstrual periods, and up to 15% of these women will have a level of pain that interferes with their daily lives. Typically, dysmenorrhea begins during adolescence, although occasionally it

can begin later in a woman's life. The prevalence of dysmenorrhea is estimated to be up to 90% in adolescents, and, in fact, is the most common reason for school absence. Dysmenorrhea can be crippling, both physically and psychologically [5, 6].

Several drugs can lessen or completely eliminate the pain of primary dysmenorrhea. The most popular choice is the nonsteroidal anti-inflammatory drugs (NSAIDs), which prevent or decrease the formation of prostaglandins. These include aspirin, ibuprofen, and naproxen. These drugs are usually begun at the first sign of the period and taken for a day or two. There are many different types of NSAIDs, and women may find that one works better for them than the others [6-9].

If an NSAID is not available, acetaminophen may also help ease the pain. Heat applied to the painful area may bring relief, and a warm bath twice a day also may help. While birth control medications will ease the pain of dysmenorrhea because they lead to lower hormone levels, they are not usually prescribed just for pain management unless the woman also wants to use them as a birth control method. This is because these medications may carry other more significant side effects and risks [6-9].

Dietary recommendations to ease cramps include increasing fiber, calcium, and complex carbohydrates, cutting fat, red meat, dairy products, caffeine, salt, and sugar. Smoking also has been found to worsen cramps. Recent research suggests that vitamin B supplements, primarily vitamin B<sub>6</sub> in a complex, magnesium, and fish oil supplements (omega-3 fatty acids) also may help relieve cramps. Other women find relief through visualization, concentrating on the pain as a particular color and gaining control of the sensations.



Aromatherapy and massage may ease pain for some women. Others find that imagining a white light hovering over the painful area can actually lessen the pain for brief periods [6-9]. Herbal medicine has an important role in women health [10-14]. There are a number of herbal remedies for treatment of depression and PMS in women and the most famous one is saffron. In addition, there are a number of herbal remedies for treatment of primary dysmenorrhea [15-21].

**Ginger (*Zingiber officinale* Rosc.):** Ginger has been traditionally used to treat ailments such as arthritis, colic, diarrhea, and heart conditions. Ginger can be consumed by boiling it in water and drinking the water at least 3 times a day to get relief from dysmenorrhea. Research and clinical trials conducted by Ozgoli et al, from Iran, show that ginger has the same effect on killing pain as mefenamic acid or ibuprofen, so it can be used as one of the home remedies for dysmenorrhea [22].

**Parsley (*Pteroselenium hortense* Hoffm.):** Parsley has menstrual cycle-regulating properties and pain relieving properties. Parsley can be consumed as a juice mixed with various vegetables such as carrots, beetroots, cucumbers, and tomatoes for good results [23].

**Mint (*Mentha longifolia* L.):** Mint has been used to treat many ailments, including stomach disorders, indigestion, nausea, and vomiting. Consumption of mint tea helps in alleviating the associated pain of dysmenorrhea [24].

**Coriander (*Coriandrum sativum* L.):** The use of coriander has been traditionally mentioned by Ayurvedic practices in India as a remedy for dysmenorrhea. It can be consumed by boiling a few stems of fresh coriander in water. This is known to reduce dysmenorrhea [24].

**Cinnamon (*Cinnamum camphora* (L.) Nees & Eberm.):** Cinnamon is one of the oldest spices known to man. This spice also has medicinal properties which include pain relieving during menstrual cramps, apart from other remedies such as the reduction of LDL cholesterol, blood sugar levels, heart disease, and cancer fighting properties [22].

**Cramp Bark & Black Haw (*Viburnum opulus* L. and *Viburnum prunifolium* L.):** These are probably the most effective herbs for reducing uterine spasm and cramping. These sister herbs bring relief of pain and muscle spasm in the uterus. Cramp bark and Black haw have been shown safe for use for several days prior to onset of menses in anticipation and prevention of painful cramps. I can attest to these plants wonderful pain relieving action. I personally feel these herbs are one of the best herbs to have on hand at all times for any sort of menstrual pain, I prefer it over NSAID's. There is also no risk of liver damage from this herb like there are with NSAID use [8, 10].

**Black Cohosh (*Actea racemosa* L.):** This plant is very anti-inflammatory and wonderful at reducing spasm in both the smooth muscles, but also the skeletal muscles associated with pain that radiates to the lower back and down the thighs [8, 10].

**Chamomile (*Matricaria chamomilla* L.):** This sweet little flower is both anti-inflammatory and antispasmodic. It is also helpful for women with digestive constipation contributing to pain. Because this herb is also a nervine and mild sedative it may help to reduce stress, relax the nervous system and induce a restful state in the body. This can be very useful when experiencing menstrual cramping accompanied by anxiety and irritability. Chamomile is best sipped as a tea during menstruation [8, 10].



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