

Can Low-Dose Oral Contraceptive Pills Help Menstrual Cramps?

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Dysmenorrhea is defined as painful menstrual cramps and can afflict up to 50% of reproductive age women. Many of these women have symptoms severe enough to prevent them from carrying on with their daily activities and significantly affect the quality of their daily lives.

Primary dysmenorrhea (PD) is defined as painful menstruation without any detectable cause and **secondary dysmenorrhea (SD)** is defined as painful menstruation where a medical cause is found (for example, endometriosis).

For women with menstrual cramps, treatment historically has focused on using analgesics (pain medications like ibuprofen), and/or preventing ovulation (preventing the egg from fully developing and coming out of the ovary). Oral contraceptives (OCPs, also known as birth control pills) containing a medium dose of the active ingredient **ethinyl estradiol** have been used to treat menstrual cramps for many years since they prevent ovulation and achieve a high level of success in relieving the pain. They are also well tolerated and have few side effects for most women.

Over the past several years, low-dose OCPs have become a popular method of contraception. These contain a lower dose of the active ingredient ethinyl estradiol compared to the medium-dose OCPs. A recent research study from Japan by Harada and colleagues in a respected medical journal looked at how well low-dose OCPs work in relieving the symptoms of PD compared to the placebo (sugar pill). 115 women with PD were randomized into two groups: group 1 received the low-dose OCPs and group 2 received the placebo. These authors found that women in group 1 (received the low-dose OCPs) had a significantly greater improvement in their symptoms of PD compared to those in group 2. These results are exciting since they suggest that medications with lower dose of estrogens, and possibly fewer side effects, also work well and may be safely offered by clinicians to patients. However, there still needs to be more research done to directly compare the efficacy of low-dose OCPs with medium-dose OCPs.

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