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April 29, 2023 · Steve Hilgers, MD

Ginger - A Promising Treatment for Pelvic Pain

Recent studies show ginger is an effective treatment for women suffering from cyclical pain - an enormous problem impacting the quality of life of so many.

Cyclical Pelvic Pain is a Real Problem

The pain women encounter with their menstrual cycle is a major issue that significantly impacts a woman's quality of life. In fact, when it comes to physician office visits, cyclical pelvic pain remains the top female medical complaint with 50% of reproductive age women, and an astounding 90% of adolescents struggling with this issue.

Pain associated with the menstrual cycle, otherwise known as dysmenorrhea, can begin to negatively impact a young girl's life within a year following her first menstrual cycle - which on average occurs by age 12.

The symptoms of dysmenorrhea are often described as a spasmodic-type cramping and pain in the lower abdomen that can radiate to the lower back and the thighs. It is quite common for this pain to last up to several days, and it is well documented that dysmenorrhea significantly impacts a woman's quality of life - resulting in a higher number of overall missed school days, absence from work, and decreased productivity. Also according to one study, approximately one-third of women rely on pain medication to help them deal with their cyclical pelvic pain.

The economic impact of dysmenorrhea is stunning. For example, the yearly economic impact of pelvic pain is estimated to be an astounding \$6.5 billion - and that is in Australia alone. And a single woman on average can spend anywhere from several hundred to several thousand dollars in out of pocket costs to deal with this difficult problem each year. In the United States, the total cost associated with chronic pelvic pain - for a single woman, over a single year - is estimated at \$17,000 dollars.

Importantly, when I speak to women directly about their pelvic pain concerns, it is truly the incalculable losses associated with dysmenorrhea - the emotional, mental, and physical aspects associated with chronic pelvic pain - that truly affects them. Over the course of a single year, a

woman dealing with dysmenorrhea can miss nearly a full month of her life struggling with pain. This is lost time spent away from the things she loves the most; unable to fully engage in her life due to the impact of pain.

Treatment Approaches are Narrowly Focused

The good news is that a substantial number of women who seek treatment for dysmenorrhea report significant improvement, yet it has been reported that many women avoid seeking help.

One reason for this treatment gap is the limited options presented to women in this area. It is well known that the mainstay treatment approach for cyclical pelvic pain focuses almost entirely on two types of treatment - pain medications, and artificial hormones in the form of birth control pills. These types of medicines have known side-effects and limitations associated with them resulting in many women looking for alternative treatment options.

Ginger's Long Standing Benefits

Ginger root (*Zingiber officinale* Roscoe) is a well-known worldwide spice and seasoning that also has a longstanding history in traditional Chinese and Indian medicine as a treatment for pain. For over 2,500 years, ginger has been used to help treat a wide-range of medical issues including - dysmenorrhea, arthritis, headaches, nausea, vomiting, diarrhea, and indigestion. Recent studies have also shown ginger may be beneficial in certain types of cancer prevention.

The pain relief properties of ginger are still not completely understood, but evidence suggests the makeup of ginger (which includes gingerols, shogaols, zingerone, and paradol) acts to inhibit the synthesis of cyclooxygenase a key component in the production of both prostaglandins and leukotrienes, which are leading culprits in the production of inflammation and pain in the body. In addition, ginger also acts, largely via shogaols, to desensitize transient receptor potential cation channel subfamily V member 1 (TRPV1), a necessary factor for the transmission of certain stimuli within the body. Accordingly, the properties of ginger act to diminish the actions of TRPV1 resulting in pain relief.

Recent Studies Reveal Ginger's Promising Benefits

Multiple medical studies have shown ginger to be a promising tool in the treatment of cyclical pelvic pain.

For example, a study performed by Jenabi et al. in 2013 revealed ginger supplementation at a dose of 500 mg taken three times per day - for the first three days of a woman's menstrual cycle - resulted in a remarkable 82.85% of women experiencing symptom relief.

Ozgoli et al., in a 2009 study, concluded that when ginger was taken at a dose of 250 mg four times per day during the first 3 days of a woman's menstrual cycle the corresponding pain relief

from ginger was equivalent to both the popular over-the-counter pain medication ibuprofen, and the prescription pain reliever mefenamic acid.

In a 2019 study, Pakniat et al. truly put ginger to the test by comparing its pelvic pain benefits to those of vitamin D, vitamin E, and mefenamic acid (a commonly prescribed pain medication). As a treatment for dysmenorrhea the study found ginger, taken at a dose of 500 mg daily, to provide the highest level of pain relief out of the group.

Importantly, the authors found “. . . [their] research clearly demonstrates that ginger (750-2,000 mg/day during the first 3-4 days of the menstrual cycle) is a very promising potential treatment for the pain and discomfort associated with . . . dysmenorrhea.”[4]

Ginger has also recently been the subject of several medical literature reviews confirming its benefits in the treatment of dysmenorrhea.

The first of these reviews was published in 2015 by Daily et al. The authors reviewed the available research involving ginger as a treatment for pelvic pain. While the total number of studies available for review was small, and the individual trial approaches had their differences, the review found ginger to be a highly effective treatment for cyclical pelvic pain.

And these findings were echoed in a second review published in 2016 by Chen et al. The authors of this study found “[t]he findings of the current review . . . [were] consistent with . . . previous reviews of ginger for pain, which concluded that there is preliminary support [for] the efficacy of ginger on pain conditions such as . . . dysmenorrhea.”[3]

Chen et al. also found that “[i]n terms of safety, the included trials suggest that ginger is relatively safe, with reported side effects . . . being infrequent . . . [and] that as pain treatment, ginger has a superior safety profile to [non-steroidal anti-inflammatory drugs], indicated by fewer gastrointestinal side effects and renal risks.”[3]

They concluded that “[g]iven the safety profile and preliminary evidence of efficacy, ginger may be appropriate for women with dysmenorrhea who cannot or prefer not to use conventional medications.”[3]

Of note, the authors in both studies indicated that the available trials did have shortcomings, and they encouraged more rigorous trials to confirm their findings.

Forms of Ginger Supplementation

While studies do vary with regard to the dose of ginger recommended for the treatment of dysmenorrhea, ginger taken initially at a dose of 500 mg once daily starting 1 to 2 days prior to a woman’s menstrual cycle, and continuing through the third day of her menstrual flow is a reasonable, and proven dose to assist women with pain relief. This 500 mg dose can be increased, based on individual tolerance, up to two to three times per day.

Ginger is available in a variety of forms, and women may prefer one form of ginger over another. “In general, 1 g of standardized extract is equivalent to 1 teaspoon of fresh grated ginger root, two droppers (2 mL) of liquid extract, four 8-oz cups of prepackaged ginger tea, four 8-oz cups of tea made with 0.5 teaspoon of grated ginger steeped for 5–10 minutes, 8 oz of ginger ale (made with real ginger—most commercial ginger ales are not effective), two pieces of crystallized ginger (1 inch square, 0.25 inches thick), or two teaspoons (10 mL) of ginger syrup. Capsules of ginger come in various dosages, ranging from 100 to 1000 mg, and chewable tablets may contain 67 to 500 mg, so attention to the dosing of the product used is advisable . . .”[9]

True Health Matters Summary

The research pertaining to ginger supplementation is certainly good news for women suffering from cyclical pelvic pain. Especially for those who desire an alternative form of treatment for dysmenorrhea, or those looking for an additional tool to add to their current management plan. While additional research is needed, the current data regarding ginger is promising, and the potential real world benefits are immense.

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