

Menstrual Cramps (Dysmenorrhea)

Dysmenorrhea means painful menstruation and is classified as primary (from the onset of menstruation) or secondary (due to some physical cause and usually of later onset). The uterus is a muscle. Like all muscles, it contracts and relaxes. Most uterine contractions are never noticed, but strong ones are painful. During strong contractions, the uterus may contract too strongly or too frequently, causing the blood supply to the uterus to be temporarily cut off. This deprives the muscle of oxygen, causing pain. This pain may be located in the abdomen or the back. In addition to painful uterine cramping with menses, women with dysmenorrhea may experience nausea, vomiting, diarrhea, headaches, weakness, and/or fainting. Symptoms may vary in severity from cycle to cycle but generally continue throughout the reproductive years. Dysmenorrhea can be an incapacitating problem, causing significant disruption in a woman's life each month.

Primary Dysmenorrhea

Primary dysmenorrhea is the more common type of dysmenorrhea and is due to the production of prostaglandins. These are natural substances made by cells in the inner lining of the uterus and other parts of the body. The prostaglandins made in the uterus make the uterine muscles contract and help the uterus shed the lining that has built up during the menstrual cycle. If excessive prostaglandins are produced, the woman may have excessive pain or dysmenorrhea with her menstrual cycle. Prostaglandins can also cause headaches, nausea, vomiting and diarrhea.

Therapies for primary dysmenorrhea include rest, heating pad to the lower abdomen or back, proper nutrition, aerobic exercise and medication. Nutrition therapy includes a well-balanced diet with an adequate intake of calcium (1000 mg. per day) and fluid intake of two quarts of water each day. Vitamin E about 500 units a day, Vitamin B1 about 100mg a day and Vitamin B6, 200 mg. each day, may occasionally be helpful.

Medication for dysmenorrhea may involve two complementary strategies: decreasing prostaglandin production and hormonal alteration.

Prostaglandin production can be decreased with over-the-counter, non-steroidal anti-inflammatory drugs (NSAIDs) such as aspirin or ibuprofen. Naproxen sodium, or similar drugs that are stronger are available only by prescription. These drugs are generally well tolerated, although they can upset the stomach and are best taken with a small amount of food. Contraindications to the use of NSAIDs include; pregnancy, ulcers, asthma and known allergy to this type of drug. NSAIDs are usually started with the onset of menstruation, although some women respond better if the medication is started 1-3 days prior to the onset of menstruation. It is sometimes necessary to take one of several NSAIDs until the one with the maximum efficacy for an individual woman is found.

Hormonal alteration of the menstrual cycle is usually accomplished by taking hormonal contraception to prevent ovulation and decrease the thickness of the uterine lining (endometrium). As a result, fewer prostaglandins are made. The birth control shot, Depo-Provera[®], 150 mg. every 10-12 weeks, can also be used to accomplish the same purpose. If Depo-Provera[®] is used to alter the hormones, it is extremely important that the woman obtain an adequate daily intake of calcium (1000 mg.). You may also want to read the Depo-Provera[®] handout.

Secondary Dysmenorrhea

Secondary dysmenorrhea is defined as menstrual pain due to pelvic pathology. Secondary dysmenorrhea usually occurs after a woman has had normal menstrual periods for some time. It differs from primary dysmenorrhea in that the pain is caused by an abnormality or disease of the uterus, Fallopian tubes or ovaries.

The pain may be similar to menstrual cramps, but often lasts longer than the menses, and may also occur at other times of the month.

The most common causes are infection, adenomyosis (benign growths in the uterine walls), endometriosis (tissue from the lining of the uterus implants outside the uterus) and adhesions (scarring or adherence of two surfaces). Treatment of secondary dysmenorrhea depends on finding the cause and treating it appropriately. Medical and/or surgical treatment may be needed.

Finding the cause

Wondering if your menstrual pain caused by normal prostaglandins (primary dysmenorrhea), or by an acquired problem requiring treatment (secondary dysmenorrhea)? Before answering this question, your health care provider will ask questions focusing on your menstrual cycle and reproductive history, do a pelvic exam and sometimes order special tests. There are many different treatment options available to treat this pain. Please call Women's Health at 244-2501 to schedule an appointment.

General information can be obtained by visiting McKinley Health Resource Centers located at:

McKinley Health Center
Main Lobby, Information/HRC counter
1109 South Lincoln Avenue Urbana, IL 61801
333-6000

Illini Union/OASIS (lower level), Room 40
1401 West Green Street Urbana, IL 61801
244-5994

References

- Dickey, R.P., (2007). Managing contraceptive pill patients, (13th ed.). New Orleans: EMIS Medical Publishing.
- Hatcher, R.A., Trussel, J., and Stewart, F., et al. Contraceptive Technology - 2004, (18th ed.). New York: Ardent Media.
- Havens, C.S., Sullivan, N.D., and Tilton, P. (1996). Manual of Outpatient Gynecology, (3rd ed.). Boston: Little, Brown and Company.
- Smith, R.P., and Kaunitz, A. M. Treatment of primary dysmenorrhea in adult women. UpToDate Web site

If you are a registered University of Illinois student and you have questions or concerns, or need to make an appointment, please call: **Dial-A-Nurse at 333-2700**

If you are concerned about any difference in your treatment plan and the information in this handout, you are advised to contact your health care provider.

Visit the McKinley Health Center Web site at: <http://www.mckinley.uiuc.edu>