The American College of Obstetricians and Gynecologists

WOMEN'S HEALTH CARE PHYSICIANS

Gynecologic Problems • EP046

Dysmenorrhea: Painful Periods

Pain associated with menstruation is called dysmenorrhea. Dysmenorrhea is the most commonly reported menstrual disorder. More than one half of women who menstruate have some pain for 1–2 days each month. Usually, the pain is mild. But for some women, the pain is so severe that it prevents them from doing their normal, day-to-day activities for several days a month. This pamphlet explains

- types of dysmenorrhea
- diagnosis
- treatment

Types of Dysmenorrhea

Most women have some pain with their menstrual periods. For some women, the pain is severe and occurs with other symptoms (see Box "Other Symptoms That Can Occur With Dysmenorrhea.") There are two types of dysmenorrhea—primary and secondary.

Primary Dysmenorrhea

Primary dysmenorrhea is pain that comes from having a menstrual period, or "menstrual cramps." It usually is caused by natural chemicals called *prostaglandins*. Prostaglandins are made in the lining of the *uterus*. There are different types of prostaglandins that have different effects. Several types cause the muscles and blood vessels of the uterus to contract. Pain usually starts right before menstruation starts, as the level of these prostaglandins increases in the

lining of the uterus. On the first day of the menstrual period, the levels are high. As menstruation continues and the lining of the uterus is shed, the levels decrease. This decrease is why pain tends to lessen after the first few days of a menstrual period.

Often, primary dysmenorrhea begins soon after a girl starts having menstrual periods. In many women with primary dysmenorrhea, menstruation becomes less painful as they get older. This kind of dysmenorrhea also may improve after giving birth. However, some women continue to have pain during their menstrual periods.

Secondary Dysmenorrhea

Secondary dysmenorrhea is caused by a disorder in the reproductive system. It may begin later in life than primary dysmenorrhea. The pain tends to get worse,

Other Symptoms That Can Occur With Dysmenorrhea

- Pulling feeling in the inner thighs
- Diarrhea
- Nausea
- Vomiting
- Headache
- Dizziness

rather than better, over time. The pain often lasts longer than normal menstrual cramps. For instance, it may begin a few days before a menstrual period starts. The pain may get worse as the menstrual period continues and may not go away after it ends.

Some of the conditions that can cause secondary dysmenorrhea include the following:

- *Endometriosis*—In this condition, tissue from the lining of the uterus is found outside the uterus, such as in the *ovaries* and *fallopian tubes*, behind the uterus, and on the *bladder*. Like the lining of the uterus, it breaks down and bleeds in response to changes in *hormones*. This bleeding can cause pain, especially right around menstruation. Scar tissue called *adhesions* may form inside the pelvis where the bleeding occurs. Adhesions can cause organs to stick together, resulting in pain.
- Adenomyosis—Tissue that normally lines the uterus begins to grow in the muscle wall of the uterus. Adenomyosis is more common in older women who have had children.
- *Fibroids*—Fibroids are growths that form on the outside, on the inside, or in the walls of the uterus. Those located in the walls of the uterus can cause pain. Small fibroids usually do not cause pain.
- Problems with the uterus, fallopian tubes, and other reproductive organs—Certain defects in these organs that you are born with can result in pain during menstruation.

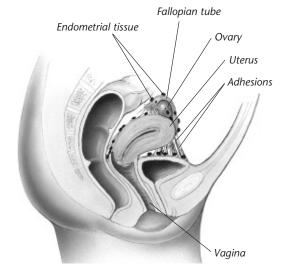
Sometimes, dysmenorrhea can result from digestive disorders, such as Crohn disease, or urinary disorders. These conditions can flare up during the menstrual period, causing menstrual pain.

Diagnosis

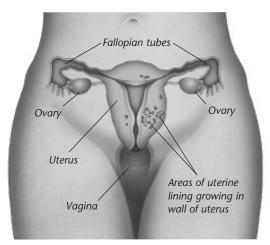
If you have dysmenorrhea, your health care provider will review your medical history, including your symptoms and menstrual cycles. He or she also will do a *pelvic exam*.

Your health care provider usually will try to treat your dysmenorrhea with medications. If medications do not work, tests may be done to find the cause of your pain. An *ultrasound* exam may be done. In some cases, your health care provider will do a *laparoscopy*. This

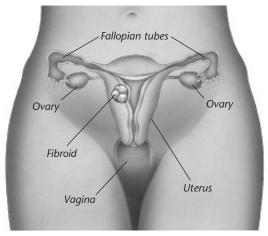
Some Causes of Secondary Dysmenorrhea



Endometriosis



Adenomyosis



Fibroid

is a type of surgery that lets your health care provider look inside the pelvic region. In laparoscopy, a small cut (incision) is made near the navel. A thin, lighted camera—a laparoscope—is inserted into the abdomen. Laparoscopy often is done with *general anesthesia* in a surgery center or hospital.

Treatment

Your health care provider may recommend medications to see if the pain can be relieved. Pain relievers or hormones often are prescribed. Some lifestyle changes also may help (see Box "Finding Relief").

If medications do not relieve pain, treatment will focus on finding and removing the cause of your dysmenorrhea. You may need surgery. In some cases, a mix of treatments works best.

Pain Relievers

Certain pain relievers, called non-steroidal anti-inflammatory drugs (NSAIDs), target prostaglandins. They reduce the amount of prostaglandins made by the body and lessen their effects. These actions make menstrual cramps less severe. These drugs also can prevent other symptoms, such as nausea and diarrhea.

Most NSAIDs, such as ibuprofen and naproxen, can be bought over-the-counter (without a prescription). NSAIDs work best if taken at the first sign of your menstrual period or pain. You usually take them for only 1 or 2 days. Women with bleeding disorders, asthma, aspirin allergy, liver damage, stomach disorders, or ulcers should not take NSAIDs.

Other Medications

If you are not trying to get pregnant, some birth control methods that contain hormones can be tried. These methods may reduce pain from both types of dysmenorrhea. Birth control methods that contain *estrogen* and *progestin*, such as the pill, the patch, and

Finding Relief

Some women find that techniques to ease discomfort work for them. You may want to try one or more of these tips:

- Exercise—Exercising most days of the week can make you feel better. Aerobic workouts, such as walking, jogging, biking, or swimming, help produce chemicals that block pain.
- Apply heat—A warm bath or a heating pad or hot water bottle on your abdomen can be soothing.
- Sleep—Make sure you get enough sleep before and during your menstrual period. Being well rested can help you cope with discomfort.
- Relax—Meditate or practice yoga. Relaxation techniques can help you cope with pain.

the vaginal ring, can be used to treat dysmenorrhea. Birth control methods that contain progestin only, such as the birth control implant and the injection, also may be effective in reducing dysmenorrhea. The hormonal *intrauterine device* can be used to treat dysmenorrhea as well. In most women, menstrual bleeding becomes lighter the longer the hormonal intrauterine device is in place. In some women, menstrual bleeding eventually stops. This side effect is helpful if you have dysmenorrhea.

If your symptoms or a laparoscopy point to endometriosis as the cause of your dysmenorrhea, birth control pills, the birth control implant, the injection, or the hormonal intrauterine device can be tried. *Gonadotropin-releasing hormone agonists* are another type of medication that may relieve endometriosis pain. These drugs may cause side effects, including bone loss, hot flashes, and vaginal dryness. They usually are given for a limited amount of time. They are not recommended for teenagers except in severe cases when other treatments have not worked.

Alternative Treatments

Certain alternative treatments may help ease dysmenorrhea. Vitamin B_1 or magnesium supplements may be helpful, but not enough research has been done to recommend them as effective treatments for dysmenorrhea. Acupuncture has been shown to be somewhat helpful in relieving dysmenorrhea.

Uterine Artery Embolization

If fibroids are causing your dysmenorrhea, a treatment called uterine artery embolization (UAE) may help. In this procedure, the blood vessels to the uterus are blocked with small particles, stopping the blood flow that allows fibroids to grow. Some women can have UAE as an outpatient procedure.

Complications include infection, pain, and bleeding. Most women will have normal menstrual periods after UAE. In 40% of women, menstrual periods do not return. It is important to keep in mind that UAE is not always successful in removing fibroids. In these cases, a hysterectomy (removal of the uterus) or other treatment may be needed.

Surgery

If other treatments do not work in relieving dysmenorrhea, surgery may be needed. The type of surgery depends on the cause of your pain.

If fibroids are causing the pain, sometimes they can be removed with surgery. Endometriosis tissue can be removed during surgery. Endometriosis tissue may return after the surgery, but removing it can reduce the pain in the short term. Taking hormonal birth control or other medications after surgery may delay or prevent the return of pain.

Hysterectomy may be done if other treatments have not worked and if the disease causing the dysmenorrhea is severe. This procedure normally is the last resort.

Finally...

Pain during the menstrual period is a common problem. Most pain is mild and can be treated with over-the-counter medications. If you have pain that prevents you from doing your normal activities or that lasts more than 2 or 3 days, see your health care provider. He or she will work with you to find a way to relieve the pain or treat the cause. In most cases, dysmenorrhea can be treated successfully without surgery.

Glossary

Adenomyosis: A condition in which the tissue that normally lines the uterus begins to grow in the muscle wall of the uterus.

Adhesions: Scarring that binds together the surfaces of tissues.

Bladder: A muscular organ in which urine is stored.

Dysmenorrhea: Discomfort and pain during the menstrual period.

Endometriosis: A condition in which tissue that lines the uterus is found outside of the uterus, usually on the ovaries, fallopian tubes, and other pelvic structures.

Estrogen: A female hormone produced in the ovaries.

Fallopian Tubes: Tubes through which an egg travels from the ovary to the uterus.

Fibroids: Benign growths that form in the muscle of the uterus.

General Anesthesia: The use of drugs that produce a sleep-like state to prevent pain during surgery.

Gonadotropin-releasing Hormone Agonists: Medical therapy used to block the effect of certain hormones.

Hormones: Substances produced by the body to control the functions of various organs.

Intrauterine Device: A small device that is inserted and left inside the uterus to prevent pregnancy.

Laparoscopy: A surgical procedure in which an instrument called a laparoscope is inserted into the pelvic cavity through small incisions. The laparoscope is used to view the pelvic organs. Other instruments can be used with it to perform surgery.

Menstruation: The monthly discharge of blood and tissue from the uterus that occurs in the absence of pregnancy.

Ovaries: Two glands, each located on either side of the uterus, that contain the eggs released at ovulation and that produce hormones.

Pelvic Exam: A manual examination of a woman's reproductive organs.

Progestin: A synthetic form of progesterone that is similar to the hormone produced naturally by the body.

Prostaglandins: Chemicals that are made by the body that have many effects, including causing the muscle of the uterus to contract, usually causing cramps.

Ultrasound: A test in which sound waves are used to examine internal organs. During pregnancy, it can be used to examine the fetus.

Uterus: A muscular organ located in the female pelvis that contains and nourishes the developing fetus during pregnancy.

This Patient Education Pamphlet was developed by the American College of Obstetricians and Gynecologists. Designed as an aid to patients, it sets forth current information and opinions on subjects related to women's health. The average readability level of the series, based on the Fry formula, is grade 6–8. The Suitability Assessment of Materials (SAM) instrument rates the pamphlets as "superior." To ensure the information is current and accurate, the pamphlets are reviewed every 18 months. The information in this pamphlet does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to the institution or type of practice, may be appropriate.

Copyright November 2014 by the American College of Obstetricians and Gynecologists. All rights reserved.

ISSN 1074-8601

To order print copies of Patient Education Pamphlets, please call 800-762-2264 or order online at sales.acog.org.

The American College of Obstetricians and Gynecologists 409 12th Street, SW PO Box 96920 Washington, DC 20090-6920