

## Dysmenorrhea

More than one half of women who menstruate have some pain for 1–2 days each month. Usually, the pain is mild. But sometimes the pain is so severe it keeps them from normal activity. Pain this severe is called dysmenorrhea. This pamphlet explains:

- Symptoms and causes
- Treatments
- How you can help relieve the pain

### The Menstrual Cycle

A menstrual cycle starts with the first day of vaginal bleeding. It ends with the first day of vaginal bleeding the next period. An average cycle lasts about 28 days.

During the cycle, two **hormones** (estrogen and progesterone) are made by the **ovaries**. These hormones cause growth changes in the endometrium (the lining of the **uterus**) so that the uterus will be ready for a possible pregnancy. On about day 14 of the cycle, an egg is released from one of the ovaries. This is called ovulation.

The egg then moves into one of the two **fallopian tubes** connected to the uterus. There it can be fertilized by a **sperm**. If this happens, the fused egg and sperm move through the fallopian tube, attach to the uterus, and pregnancy occurs. If the egg is not fertilized, the levels of hormones decrease. That signals the uterus to shed its lining, which is when the menstrual period begins. For some women this menstrual bleeding causes mild cramps, for others it causes severe pain.

### Causes of Menstrual Pain

The uterus is a muscle. Like all muscles, it can contract and relax. During your period, it contracts more strongly. Sometimes when it contracts you feel a cramping pain.

The uterine muscles contract when **prostaglandins** are produced. Prostaglandins are chemicals made by the lining of the uterus. Before your period, the level of these chemicals increases. At the start of your period, prostaglandin levels are high. As you

Pain during the menstrual period is a common problem for women. In most cases it can be treated.

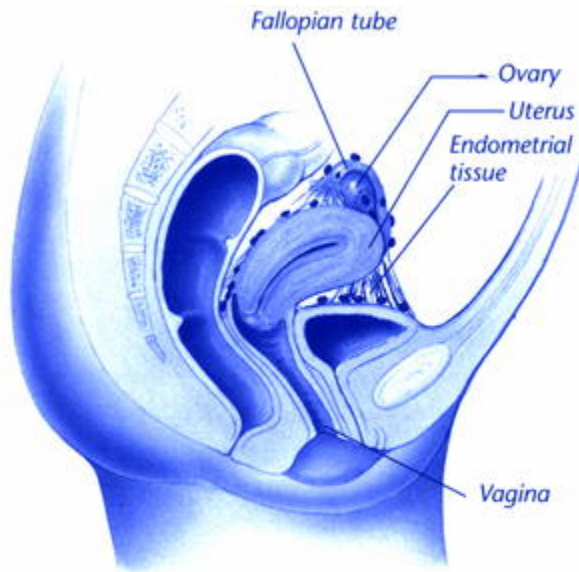
### Symptoms of Dysmenorrhea

- Cramps or pain in the lower abdomen or lower back
- Pulling feeling in the inner thighs
- Diarrhea
- Nausea
- Vomiting
- Headache
- Dizziness

menstruate, the level of prostaglandins decreases. This is why pain tends to lessen after the first few days of the period.

## Types of Dysmenorrhea

Although most women have some discomfort with their periods, sometimes the pain is severe and may be accompanied by other symptoms (see [box](#)). This is called dysmenorrhea. There are two types of dysmenorrhea—primary or secondary.



*Painful menstrual periods may be caused by endometriosis. This occurs when endometrial tissue attaches to other organs in the pelvis.*

### Primary Dysmenorrhea

Primary dysmenorrhea is pelvic pain that comes from having your period and the natural production of prostaglandins. Often it begins soon after a pre-teen or teen starts having periods. In many cases, a woman's periods become less painful as she gets older. The pain also may lessen after giving birth. However, some women continue to have pain during their periods.

### Secondary Dysmenorrhea

Secondary dysmenorrhea has causes other than menstruation and the natural production of prostaglandins. It may begin later in life than primary

dysmenorrhea. This type of pain often lasts longer than normal cramps. For instance, it may begin long before your period starts. The pain may get worse with your period and not go away after your period ends. Some of the most common causes of secondary dysmenorrhea are:

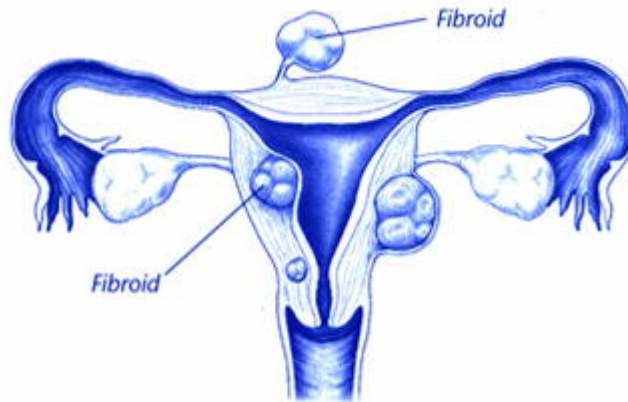
- Endometriosis—a condition in which tissue from the lining of the uterus is located outside of the uterus, such as in the ovaries and fallopian tubes. This tissue still acts like it does in the uterus. It responds to monthly changes in hormones and also breaks down and bleeds. This bleeding, which occurs outside of the uterus and vagina, can cause pain, especially right before, during, or after your period.
- Fibroids—muscle tumors or growths that form on the outside, the inside, or in the walls of the uterus. These tumors are not cancerous, but they can cause pain and heavy menstrual bleeding.

## Diagnosis

The cause of dysmenorrhea is determined by your medical history, including your symptoms and menstrual cycles, and a *pelvic exam*. Based on these results, your doctor also may suggest some additional exams and tests, such as:

- A *Pap test*
- Certain lab tests
- An *ultrasound* exam

In some cases, the doctor can learn more by looking inside the pelvic region of your body. This is most often done by a surgical procedure called laparoscopy. In this procedure, the doctor makes a small cut near your navel. A thin lighted device—a laparoscope—is then inserted into your abdomen. The laparoscope lets the doctor view the pelvic organs. Laparoscopy often is done with *general anesthesia* in a surgery center or hospital.



*Fibroids can cause painful periods and heavy menstrual bleeding.*

Sometimes, the doctor can find a specific cause for dysmenorrhea. That cause then can be treated. But often the cause cannot be precisely defined. Based on the results of the tests, you and your doctor will choose the best treatment for you.

## **Treatment**

The treatment for dysmenorrhea may include medications and techniques to relieve pain. If the cause of dysmenorrhea is found, the treatment will focus on removing or reducing the problem. Your doctor may suggest hormones or medications that relax the muscles of the uterus. In some cases, you may need surgery to remove the cause of pain or reduce the pain. Some complementary and alternative treatments may help. In some cases, a mix of treatments works best.

## **Medications**

Certain medications, called NSAIDs (non-steroidal anti-inflammatory drugs), block the body from making prostaglandins. This makes cramps less severe. These drugs also can prevent some symptoms, such as nausea and diarrhea. Most NSAIDs, such as ibuprofen and naproxen, can be bought over-the-counter (without a prescription). Another type, COX-2 inhibitors, may be prescribed.

NSAIDs work best if taken at the first sign of your period or pain. You usually take them for only 1 or 2 days and should avoid alcohol during this time. Women with bleeding disorders, liver damage, stomach disorders, or ulcers should not take NSAIDs.

### ***Hormonal Contraception***

Hormonal contraception, such as birth control pills, patches, and vaginal rings, also reduce menstrual pain. In some cases, the hormonal ***intrauterine device (IUD)*** may be recommended. The hormones in these types of contraception help control the growth of the lining of the uterus so less prostaglandin is made. That means there are fewer contractions, less blood flow, and less pain. Hormones may stop the growth of fibroids and endometriosis. However, they often grow back when treatment stops. If needed, contraception can be used with other medications that decrease estrogen levels or stop menstrual cycles. This helps prevent pain before it starts.

### ***Surgery***

If fibroids are causing the pain, your doctor may suggest surgery or ***uterine artery embolization***. During surgery, the fibroid or the entire uterus may be removed.

Laparoscopy may be used to treat endometriosis. Tissue growing outside the uterus can be removed with laparoscopy or with open (abdominal) surgery. The tissue growth may return after the surgery, but removing it can reduce the pain.

For the most severe cases, hysterectomy (removal of the uterus) may be done. This is normally the last resort.

### ***Other Treatments***

Other treatments may help ease pain, although they do not prevent it:

- Taking a vitamin B<sub>1</sub> or magnesium supplement
- Massage
- Acupuncture or acupressure

Efforts to reduce stress also may help (see box).

### **Finding Relief**

Some women find that techniques to ease discomfort work for them, but each woman is different. You may want to try one or more of the following 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 period. This can help you cope with any discomfort.
- **Have sex**—Orgasms can relieve menstrual cramps in some women.
- **Relax**—Meditate or practice yoga. Relaxation techniques can help you cope with pain.

## Finally...

Pain during the menstrual period is a common problem for women. Most pain is mild and can be treated with over-the-counter medications. Sometimes, the pain is severe and requires further treatment.

If you have severe menstrual cramps or cramps that last more than 2 or 3 days, see your doctor. He or she will work with you to help you find a way to relieve the pain or treat the cause.

## Glossary

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

***General Anesthesia:*** The use of drugs that produce a sleeplike state to prevent pain during surgery.

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

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

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

***Pap Test:*** A test in which cells are taken from the cervix and examined under a microscope.

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

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

***Sperm:*** A male cell that is produced in the testes and can fertilize a female egg cell.

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

***Uterine Artery Embolization:*** A procedure used to treat fibroids in which the blood vessels to the uterus are blocked. This helps stop the blood flow that allows fibroids to grow.

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