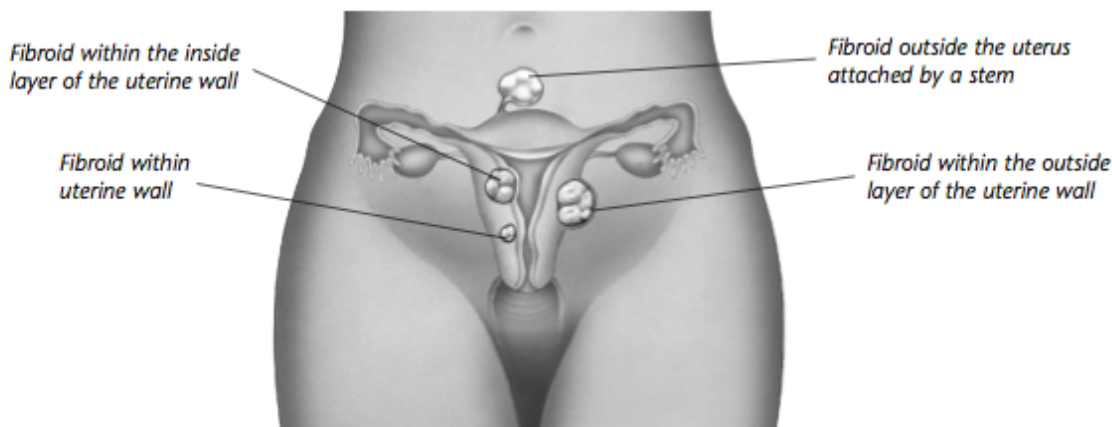


Uterine Fibroids

- What are uterine fibroids?
- Who is most likely to have fibroids?
- What are symptoms of fibroids?
- What complications can occur with fibroids?
- How are fibroids diagnosed?
- When is treatment necessary for fibroids?
- Can medication be used to treat fibroids?
- What types of surgery may be done to treat fibroids?
- Are there other treatments besides medication and surgery?
- Glossary

What are uterine fibroids?

Uterine fibroids are benign (not cancer) growths that develop from the muscle tissue of the **uterus**. They also are called leiomyomas or myomas. The size, shape, and location of fibroids can vary greatly. They may be present inside the uterus, on its outer surface or within its wall, or attached to it by a stem-like structure. A woman may have only one fibroid or many of varying sizes. A fibroid may remain very small for a long time and suddenly grow rapidly, or grow slowly over a number of years.



Fibroids may be attached to the outside of the uterus or be located inside the uterus or uterine wall.

Who is most likely to have fibroids?

Fibroids are most common in women aged 30–40 years, but they can occur at any age. Fibroids occur more often in African American women than in white women. They also seem to occur at a younger age and grow more quickly in African American women.

What are symptoms of fibroids?

Fibroids may have the following symptoms:

- Changes in **menstruation**
 - Longer, more frequent, or heavy menstrual periods
 - Menstrual pain (cramps)
 - Vaginal bleeding at times other than menstruation
 - Anemia** (from blood loss)
- Pain
 - In the abdomen or lower back (often dull, heavy and aching, but may be sharp)
 - During sex
- Pressure
 - Difficulty urinating or frequent urination
 - Constipation, rectal pain, or difficult bowel movements
 - Abdominal cramps
- Enlarged uterus and abdomen
- Miscarriages
- Infertility

Fibroids also may cause no symptoms at all. Fibroids may be found during a routine **pelvic exam** or during tests for other problems.

What complications can occur with fibroids?

Fibroids that are attached to the uterus by a stem may twist and can cause pain, nausea, or fever. Fibroids that grow rapidly, or those that start breaking down, also may cause pain. Rarely, they can be associated with cancer. A very large fibroid may cause swelling of the abdomen. This swelling can make it hard to do a thorough pelvic exam.

Fibroids also may cause infertility, although other causes are more common. Other factors should be explored before fibroids are considered the cause of a couple's infertility. When fibroids are thought to be a cause, many women are able to become pregnant after they are treated.

How are fibroids diagnosed?

The first signs of fibroids may be detected during a routine pelvic exam. A number of tests may show more information about fibroids:

- **Ultrasonography** uses sound waves to create a picture of the uterus and other pelvic organs.
- **Hysteroscopy** uses a slender device (the hysteroscope) to see the inside of the uterus. It is inserted through the vagina and cervix (opening of the uterus). This permits the doctor to see fibroids inside the uterine cavity.
- **Hysterosalpingography** is a special X-ray test. It may detect abnormal changes in the size and shape of the uterus and fallopian tubes.
- **Sonohysterography** is a test in which fluid is put into the uterus through the cervix. Ultrasonography is then used to show the inside of the uterus. The fluid provides a clear

picture of the uterine lining.

- **Laparoscopy** uses a slender device (the laparoscope) to help the doctor see the inside of the abdomen. It is inserted through a small cut just below or through the navel. The doctor can see fibroids on the outside of the uterus with the laparoscope.

Imaging tests, such as magnetic resonance imaging and computed tomography scans, may be used but are rarely needed. Some of these tests may be used to track the growth of fibroids over time.

When is treatment necessary for fibroids?

Fibroids that do not cause symptoms, are small, or occur in a woman who is nearing menopause often do not require treatment. Certain signs and symptoms may signal the need for treatment:

- Heavy or painful menstrual periods that cause anemia or that disrupt a woman's normal activities
- Bleeding between periods
- Uncertainty whether the growth is a fibroid or another type of tumor, such as an ovarian tumor
- Rapid increase in growth of the fibroid
- Infertility
- Pelvic pain

Can medication be used to treat fibroids?

- Drug therapy is an option for some women with fibroids. Medications may reduce the heavy bleeding and painful periods that fibroids sometimes cause. They may not prevent the growth of fibroids. Surgery often is needed later. Drug treatment for fibroids includes the following options:
- Birth control pills and other types of hormonal birth control methods—These drugs often are used to control heavy bleeding and painful periods.
- Gonadotropin-releasing hormone (GnRH) agonists—These drugs stop the menstrual cycle and can shrink fibroids. They sometimes are used before surgery to reduce the risk of bleeding. Because GnRH agonists have many side effects, they are used only for short periods (less than 6 months). After a woman stops taking a GnRH agonist, her fibroids usually return to their previous size.
- **Progesterin**-releasing **intrauterine device**—This option is for women with fibroids that do not distort the inside of the uterus. It reduces heavy and painful bleeding but does not treat the fibroids themselves.

What types of surgery may be done to treat fibroids?

Myomectomy is the surgical removal of fibroids while leaving the uterus in place. Because a woman keeps her uterus, she may still be able to have children. Fibroids do not regrow after surgery, but new fibroids may develop. If they do, more surgery may be needed.

Hysterectomy is the removal of the uterus. The ovaries may or may not be removed. Hysterectomy is done when other treatments have not worked or are not possible or the fibroids are very large. A woman is no longer able to have children after having a hysterectomy.

Are there other treatments besides medication and surgery?

Other treatment options are as follows:

- Hysteroscopy—This technique is used to remove fibroids that protrude into the cavity of the uterus. A **resectoscope** is inserted through the hysteroscope. The resectoscope destroys fibroids with electricity or a laser beam. Although it cannot remove fibroids deep in the walls of the uterus, it often can control the bleeding these fibroids cause. Hysteroscopy often can be

- performed as an outpatient procedure (you do not have to stay overnight in the hospital).
- Endometrial ablation—This procedure destroys the lining of the uterus. It is used to treat women with small fibroids (less than 3 centimeters). There are several ways to perform endometrial ablation.
 - Uterine artery embolization (UAE)—In this procedure, tiny particles (about the size of grains of sand) are injected into the blood vessels that lead to the uterus. The particles cut off the blood flow to the fibroid and cause it to shrink. UAE can be performed as an outpatient procedure in most cases.
 - Magnetic resonance imaging-guided ultrasound surgery—In this new approach, ultrasound waves are used to destroy fibroids. The waves are directed at the fibroids through the skin with the help of magnetic resonance imaging. Studies show that women have improved symptoms up to 1 year after having the procedure. Whether this approach provides long-term relief is currently being studied.

Glossary

Anemia: Abnormally low levels of blood or red blood cells in the bloodstream. Most cases are caused by iron deficiency, or lack of iron.

Hysterosalpingography: A special X-ray procedure in which a small amount of fluid is injected into the uterus and fallopian tubes to detect abnormal changes in their size and shape or to determine whether the tubes are blocked.

Hysteroscopy: A surgical procedure in which a slender, light-transmitting telescope, the hysteroscope, is used to view the inside of the uterus or perform surgery.

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

Laparoscopy: A surgical procedure in which a slender, light-transmitting telescope, the laparoscope, is inserted into the pelvic cavity through small incisions. The laparoscope is used to view the pelvic organs. Other instruments can be used to perform surgery.

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

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.

Resectoscope: A slender telescope with an electrical wire loop or rollerball tip used to remove or destroy tissue inside the uterus.

Sonohysterography: A procedure in which fluid is put into the uterus and ultrasonography is used to view the inside of the uterus.

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

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

If you have further questions, contact your obstetrician–gynecologist.

Designed as an aid to patients, this document sets forth current information and opinions related to women's health. The information 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 institution or type of practice, may be appropriate.