

PATIENT EDUCATION



The American College of
Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

Endometrial Cancer

Endometrial cancer is cancer of the **endometrium**, the lining of the **uterus**. Its main symptom is **abnormal uterine bleeding**. Endometrial cancer often is found early in the course of the disease, when it is most treatable.

This pamphlet explains

- general information about endometrial cancer
- risk factors
- symptoms
- treatment and follow-up care

Overview

Endometrial cancer is the most common type of cancer that affects the female reproductive organs. In the United States, more than 60,000 women are diagnosed with endometrial cancer each year.

Endometrial cancer occurs when the cells of the endometrium start to grow too rapidly. The lining of the uterus may thicken in certain places. These areas of thickness may form a mass of tissue called a **tumor**. Cancer cells also can spread (**metastasize**) to other areas of the body.

There are different types of endometrial cancer. The most common type (type 1) grows slowly. It most often is found only inside the uterus. Type 2 is less common. It grows more rapidly and tends to spread to other parts of the body.

A condition that may lead to type 1 endometrial cancer is called **endometrial intraepithelial neoplasia (EIN)**. In EIN, areas of the endometrium grow too thick and show changes that look like cancer. Abnormal

uterine bleeding is a common sign of EIN. This is why it is important to have any abnormal bleeding checked by your health care professional. Diagnosis and treatment of EIN can prevent it from becoming cancer.

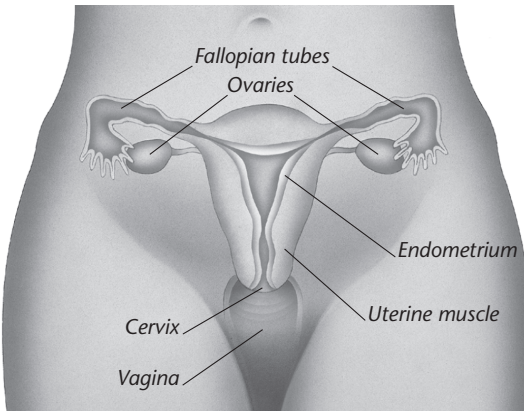
Risk Factors

Certain factors increase the risk of endometrial cancer (see box). A few risk factors are discussed in detail below.

Age

Most cases of endometrial cancer are diagnosed in women who are past **menopause** and are in their mid-60s. Endometrial cancer is rare in women younger than 40 years, but it can occur, especially in women who are obese, have not given birth, or have irregular menstrual cycles. An inherited condition called **Lynch syndrome** also can increase the risk of endometrial cancer at an earlier age (see "Genetics").

Female Reproductive Tract



Endometrial cancer is cancer of the endometrium, which is the tissue that lines the uterus.

Hormonal Factors

Estrogen and **progesterone** are **hormones** that control the functions of the female reproductive system. The levels of these hormones in a woman's body can affect her risk of endometrial cancer. When estrogen is present without enough progesterone, it can cause the endometrium to become too thick. This condition can occur in women with irregular menstrual periods, during **perimenopause** and menopause, and with certain medical disorders, such as **polycystic ovary syndrome (PCOS)**.

Risk Factors

Factors associated with an increased risk of endometrial cancer including the following:

- Older age
- White race
- Irregular menstrual periods
- Infertility
- Never given birth
- Late menopause
- Starting menstrual periods at an early age (before age 12 years)
- Long-term use of estrogen without progestin to treat menopause
- Use of tamoxifen to treat or prevent breast cancer
- Obesity
- Estrogen-producing tumor
- History of type 2 diabetes, high blood pressure, gallbladder disease, or thyroid disease
- Lynch syndrome

Some forms of **hormone therapy** used for the treatment of menopause symptoms are associated with an increased risk of endometrial cancer. In women who have a uterus, estrogen-only therapy can cause the endometrium to thicken. For this reason, women who have a uterus are advised to take estrogen along with a form of progesterone called **progestin**. This dual therapy keeps the endometrium from thickening too much and decreases the risk of endometrial cancer.

Being Overweight

Being overweight—having a **body mass index (BMI)** of 25 or greater—is a major risk factor for endometrial cancer. As BMI increases, so does the risk of cancer. Obesity is one of the factors that most strongly increases the risk of endometrial cancer in younger women.

Genetics

Lynch syndrome is an inherited condition that increases the risk of colon cancer, ovarian cancer, endometrial cancer, and other types of cancer. It is caused by a change or **mutation** in a **gene** that is passed down in families. Women who have endometrial cancer are tested for this condition.

Symptoms

Most women with endometrial cancer have early symptoms. The most common symptom of endometrial cancer is abnormal uterine bleeding. For women who are premenopausal, this includes irregular menstrual bleeding, spotting, and bleeding between menstrual periods. For women who are postmenopausal, any bleeding is abnormal. Symptoms of advanced endometrial cancer include abdominal or pelvic pain, bloating, feeling full quickly when eating, and changes in bowel or bladder habits.

Diagnosis

There are no screening tests to detect endometrial cancer in women with no symptoms. The **Pap test**, which is used to screen for cervical cancer, can only sometimes help detect endometrial cancer.

If you are postmenopausal, any abnormal bleeding needs to be checked. You may first have a **transvaginal ultrasound** exam. During this exam, the thickness of the endometrium and the size of the uterus are measured. A thickened endometrium (more than 4 mm) means that more testing is needed.

The standard way that endometrial cancer is diagnosed is with an **endometrial biopsy**. In this procedure, a sample of the endometrium is removed and looked at under a microscope. This test may be performed in your gynecologist's office. Another way the endometrium can be sampled is with **dilation and curettage (D&C)**. A lighted instrument with a camera called a **hysteroscope** may be used to help guide this procedure. **Anesthesia** is given to make you more comfortable.

If you are premenopausal, your gynecologist will consider your signs and symptoms, age, and other

medical factors to decide whether a biopsy is needed. An ultrasound exam is not as helpful if you are premenopausal in diagnosing endometrial cancer.

Treatment

Treatment of endometrial cancer is managed by an endometrial cancer specialist, such as a *gynecologic oncologist*. The type of treatment depends on your age and your desire to have more children. If you are postmenopausal, surgery to remove the uterus usually is recommended. If you are premenopausal, nonsurgical treatment options can be considered in some special cases. This decision is best made after consulting with an endometrial cancer specialist.

Surgery

Endometrial cancer usually is treated with surgery. After surgery, the *stage* of disease is determined. Staging helps your doctor decide if additional treatment, such as *chemotherapy* or *radiation therapy*, is needed. Stages of cancer range from I to IV. Stage IV is the most advanced. The stage of cancer affects the treatment and outcome.

Surgery for endometrial cancer includes removal of the cervix and uterus (total *hysterectomy*) and removal of both *ovaries* and *fallopian tubes (salpingo-oophorectomy)*. *Lymph nodes* and other tissue may be removed and tested to find out if they contain cancer.

In the past, surgery to treat endometrial cancer was almost always done with an incision in the abdomen (*laparotomy*). Currently, *minimally invasive surgery*, such as *laparoscopy* or robot-assisted surgery, is considered safe and effective for the treatment of endometrial cancer. This type of surgery results in fewer complications, a shorter hospital stay, and a quicker recovery time than laparotomy.

Radiation Therapy

Radiation stops cancer cells from growing by exposing them to high-energy X-rays. Radiation therapy may be recommended after surgery for some women who are at a higher risk of the cancer coming back (*recurrence*). Factors that increase the risk of recurrence include fast-growing cancer, cancer that is present outside the uterus, or cancer that has spread deep into the muscle layer of the uterus. Age also is a factor in the risk of recurrence.

Chemotherapy

Chemotherapy is recommended for advanced-stage and recurrent endometrial cancer. Chemotherapy is the use of cancer-fighting drugs. Chemotherapy for endometrial cancer sometimes is combined with radiation therapy.

Hormone Therapy

Almost 1 in 10 women in whom cancer is diagnosed is younger than age 44 years. Some women have not yet completed their families. Treatment with progestin is an option for women who want to have more children

or for women who cannot have surgery for other medical reasons. This option usually is only recommended for women who

- have slower-growing cancer that has not reached the muscle layer of the uterus
- do not have cancer outside of the uterus
- are in general good health and are able to take progestin
- understand that information about future outcomes is limited

For some women, it may be possible to keep the ovaries at the time of surgery. Keeping your ovaries means that you may be able to use your own eggs for *in vitro fertilization (IVF)*. This choice is not for everyone and is best made in consultation with your health care team.

After Treatment

You will need to have regular health care visits after treatment for endometrial cancer. The purpose of these visits is to make sure that you stay healthy and to check any signs and symptoms that could signal a recurrence. However, with stage I disease, 90% of women will have no sign of cancer 5 or more years after treatment.

A healthy lifestyle is recommended after cancer treatment. Several studies have found that obesity, high blood pressure, and diabetes can contribute to long-term health risks for women with type 1 endometrial cancer. A healthy diet and regular exercise can help lower these risks.

Finally...

Most cases of endometrial cancer are found in its early stages, when it is most easily treated. The most common symptom is abnormal uterine bleeding. If you have abnormal uterine bleeding, contact your gynecologist. Treatment of endometrial cancer usually involves surgery. For most women with early-stage cancer, this treatment results in a complete cure.

Glossary

Abnormal Uterine Bleeding: Bleeding from the uterus that is different from what is normal for a woman who is not pregnant. This bleeding may vary in how long, how regular, and how often it occurs.

Anesthesia: Relief of pain by loss of sensation.

Body Mass Index (BMI): A number calculated from height and weight. BMI is used to determine whether a person is underweight, normal weight, overweight, or obese.

Chemotherapy: Treatment of cancer with drugs.

Dilation and Curettage (D&C): A procedure that opens the cervix so tissue in the uterus can be removed using an instrument called a curette.

Endometrial Biopsy: A procedure in which a small amount of the tissue lining the uterus is removed and examined under a microscope.

Endometrial Cancer: Cancer of the lining of the uterus.

Endometrial Intraepithelial Neoplasia (EIN): A precancerous condition in which areas of the lining of the uterus grow too thick.

Endometrium: The lining of the uterus.

Estrogen: A female hormone produced in the ovaries.

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

Gene: A segment of DNA that contains instructions for the development of a person's physical traits and control of the processes in the body. The gene is the basic unit of heredity and can be passed from parent to child.

Gynecologic Oncologist: A physician who has special training and experience in the diagnosis and treatment of cancer of the female reproductive organs.

Hormones: Substances made in the body that control the function of cells or organs.

Hormone Therapy: Treatment in which estrogen and often progestin are taken to help relieve symptoms that may happen around the time of menopause.

Hysterectomy: Surgery to remove the uterus.

Hysteroscope: A thin, lighted telescope that is used to look inside the uterus and do procedures.

In Vitro Fertilization (IVF): A procedure in which an egg is removed from a woman's ovary, fertilized in a laboratory with the man's sperm, and then transferred to the woman's uterus to achieve a pregnancy.

Laparoscopy: A surgical procedure in which a thin, lighted telescope called a laparoscope is inserted through a small incision (cut) in the abdomen. The laparoscope is used to view the pelvic organs. Other instruments can be used with it to perform surgery.

Laparotomy: A surgical procedure in which an incision is made in the abdomen.

Lymph Nodes: Small groups of special tissue that carry lymph, a liquid that bathes body cells. Lymph nodes are connected to each other by lymph vessels. Together, these make up the lymphatic system.

Lynch Syndrome: A genetic condition that increases a person's risk of cancer of the colon, rectum, ovary, uterus, pancreas, and bile duct.

Menopause: The time when a woman's menstrual periods stop permanently. Menopause is confirmed after 1 year of no periods.

Metastasis: Spreading of cancer to other parts of the body.

Minimally Invasive Surgery: Surgery done through a very small cut.

Mutation: A change in a gene that can be passed from parent to child.

Ovaries: Organs in women that contain the eggs necessary to get pregnant and make important hormones, such as estrogen, progesterone, and testosterone.

Pap Test: A test in which cells are taken from the cervix (or vagina) to look for signs of cancer.

Perimenopause: The time period leading up to menopause.

Polycystic Ovary Syndrome (PCOS): A condition that leads to a hormone imbalance that affects a woman's monthly menstrual periods, ovulation, ability to get pregnant, and metabolism.

Progesterone: A female hormone that is made in the ovaries and prepares the lining of the uterus for pregnancy.

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

Radiation Therapy: Treatment with radiation.

Recurrence: The return of disease or its signs and symptoms.

Salpingo-oophorectomy: Surgery to remove an ovary and fallopian tube.

Stage: Stage can refer to the size of a tumor and the extent (if any) to which the disease has spread.

Transvaginal Ultrasound: A type of ultrasound in which the device is placed in your vagina.

Tumor: A growth or lump made up of cells.

Uterus: A muscular organ in the female pelvis. During pregnancy, this organ holds and nourishes the fetus.

This information was designed as an educational aid to patients and sets forth current information and opinions related to women's health. It is not intended as a statement of the standard of care, nor does it comprise all proper treatments or methods of care. It is not a substitute for a treating clinician's independent professional judgment. Please check for updates at www.acog.org to ensure accuracy.

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This is EP097 in ACOG's Patient Education Pamphlet Series.

ISSN 1074-8601

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