

# **Endometrial Cancer**

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#### What is endometrial cancer?

**Endometrial cancer** is cancer of the **endometrium**, which is the lining of the **uterus**. It is the most common type of cancer that affects the female reproductive organs. The most common type of endometrial cancer (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.

### How does endometrial cancer occur?

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.

# What is endometrial intraepithelial neoplasia?

**Endometrial intraepithelial neoplasia (EIN)** is a condition that may lead to type 1 endometrial cancer. 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. Diagnosis and treatment of EIN can prevent it from becoming cancer.

### What are the risk factors for endometrial cancer?

Some of the risk factors for endometrial cancer include the following:

- Age—Most cases of endometrial cancer are diagnosed in women who are past **menopause** and are in their mid-60s.
- Levels of *hormones*—The levels of *estrogen* and *progesterone* 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)*. It also can occur in women who have a uterus who use estrogen-only therapy to treat menopause symptoms.
- 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.
- 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.

### What are the symptoms of endometrial cancer?

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.

### How is endometrial cancer diagnosed?

There are no screening tests to detect endometrial cancer in women with no symptoms. 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.

# How is endometrial cancer treated?

Endometrial cancer usually is treated with surgery. During surgery, the cervix and uterus are removed (total **hysterectomy**), as well as both **ovaries** and **fallopian tubes** (**salpingo-oophorectomy**). **Lymph nodes** and other tissue may be removed and tested to find out if they contain cancer.

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.

# How is hormone therapy used to treat endometrial cancer?

Treatment with *progestin* is an option for women who want to have more children or for women who cannot have surgery because of 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.

# What happens after treatment for endometrial cancer?

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. 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.

#### 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.

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

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.

**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: 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.

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

**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.

**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.

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 Exam: 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.

#### If you have further questions, contact your obstetrician-gynecologist.

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