

# **Endometrial Hyperplasia**

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### What is endometrial hyperplasia?

Endometrial hyperplasia occurs when the **endometrium**, the lining of the **uterus**, becomes too thick. It is not cancer, but in some cases, it can lead to cancer of the uterus.

# How does the endometrium normally change throughout the menstrual cycle?

The endometrium changes throughout the menstrual cycle in response to *hormones*. During the first part of the cycle, the hormone *estrogen* is made by the ovaries. Estrogen causes the lining to grow and thicken to prepare the uterus for pregnancy. In the middle of the cycle, an egg is released from one of the ovaries (*ovulation*). Following ovulation, levels of another hormone called *progesterone* begin to increase. Progesterone prepares the endometrium to receive and nourish a fertilized egg. If pregnancy does not occur, estrogen and progesterone levels decrease. The decrease in progesterone triggers *menstruation*, or shedding of the lining. Once the lining is completely shed, a new menstrual cycle begins.

# What causes endometrial hyperplasia?

Endometrial hyperplasia most often is caused by excess estrogen without progesterone. If ovulation does not occur, progesterone is not made, and the lining is not shed. The endometrium may continue to grow in response to estrogen. The *cells* that make up the lining may crowd together and may become abnormal. This condition, called hyperplasia, may lead to cancer in some women.

### When does endometrial hyperplasia occur?

Endometrial hyperplasia usually occurs after *menopause*, when ovulation stops and progesterone is no longer made. It also can occur during *perimenopause*, when ovulation may not occur regularly. Listed as follows are other situations in which women may have high levels of estrogen and not enough progesterone:

- Use of medications that act like estrogen
- Long-term use of high doses of estrogen after menopause (in women who have not had a hysterectomy)
- Irregular menstrual periods, especially associated with *polycystic ovary syndrome* or infertility
- Obesity

### What risk factors are associated with endometrial hyperplasia?

Endometrial hyperplasia is more likely to occur in women with the following risk factors:

- Age older than 35 years
- White race
- Never having been pregnant
- Older age at menopause
- Early age when menstruation started
- Personal history of certain conditions, such as diabetes mellitus, polycystic ovary syndrome, gallbladder disease, or thyroid disease
- Obesity
- Cigarette smoking
- Family history of ovarian, colon, or uterine cancer

## What are the types of endometrial hyperplasia?

Endometrial hyperplasia is classified as simple or complex. It also is classified by whether certain cell changes are present or absent. If abnormal changes are present, it is called atypical. The terms are combined to describe the exact kind of hyperplasia:

- Simple hyperplasia
- Complex hyperplasia
- Simple atypical hyperplasia
- · Complex atypical hyperplasia

# What are signs and symptoms of endometrial hyperplasia?

The most common sign of hyperplasia is abnormal uterine bleeding. If you have any of the following, you should see your health care provider:

- Bleeding during the menstrual period that is heavier or lasts longer than usual
- Menstrual cycles that are shorter than 21 days (counting from the first day of the menstrual period to the first day of the next menstrual period)
- Any bleeding after menopause

### How is endometrial hyperplasia diagnosed?

There are many causes of abnormal uterine bleeding. If you have abnormal bleeding and you are 35 years or older, or if you are younger than 35 years and your abnormal bleeding has not been helped by medication, your health care provider may perform diagnostic tests for endometrial hyperplasia and cancer.

**Transvaginal ultrasound** may be done to measure the thickness of the endometrium. For this test, a small device is placed in your vagina. Sound waves from the device are converted into images of the pelvic organs. If the endometrium is thick, it may mean that endometrial hyperplasia is present.

The only way to tell for certain that cancer is present is to take a small sample of tissue from the endometrium and study it under a microscope. This can be done with an *endometrial biopsy*, *dilation and curettage*, or *hysteroscopy*.

#### What treatments are available for endometrial hyperplasia?

In many cases, endometrial hyperplasia can be treated with *progestin*. Progestin is given orally, in a shot, in an *intrauterine device*, or as a vaginal cream. How much and how long you take it depends on your age and the type of hyperplasia. Treatment with progestin may cause vaginal bleeding like a menstrual period.

If you have atypical hyperplasia, especially complex atypical hyperplasia, the risk of cancer is increased. Hysterectomy usually is the best treatment option if you do not want to have any more children.

## What can I do to help prevent endometrial hyperplasia?

You can take the following steps to reduce the risk of endometrial hyperplasia:

- If you take estrogen after menopause, you also need to take progestin or progesterone.
- If your menstrual periods are irregular, birth control pills (oral contraceptives) may be recommended. They contain estrogen along with progestin. Other forms of progestin also may be taken.
- If you are overweight, losing weight may help. The risk of endometrial cancer increases with the degree of obesity.

### **Glossary**

Cells: The smallest units of a structure in the body; the building blocks for all parts of the body.

**Diabetes Mellitus:** A condition in which the levels of sugar in the blood are too high.

Dilation and Curettage: A procedure in which the cervix is opened and tissue is gently scraped or suctioned from the inside of the uterus.

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

**Endometrium:** The lining of the uterus.

Estrogen: A female hormone produced in the ovaries that stimulates the growth of the lining of the uterus.

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

Hysterectomy: Removal of the uterus.

*Hysteroscopy:* A procedure in which a slender, light-transmitting device, the hysteroscope, is inserted into the uterus through the cervix 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.

**Menopause:** The time in a woman's life when the ovaries have stopped functioning, defined as the absence of menstrual periods for 1 year.

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

**Ovulation:** The release of an egg from one of the ovaries.

Perimenopause: The period preceding menopause that usually extends from age 45 years to 55 years.

**Polycystic Ovary Syndrome:** A condition in which levels of certain hormones are abnormal and small growths called cysts may be present on the ovaries. It is associated with infertility and may increase the risk of diabetes mellitus and heart disease.

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

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

Transvaginal Ultrasound: A type of ultrasound in which a transducer specially designed to be placed in the vagina is used.

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

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

**FAQ147:** 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 the institution or type of practice, may be appropriate.

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