PATIENT EDUCATION

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

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. Early diagnosis and treatment are important. For some women who are at increased risk of hyperplasia, medication can be taken to decrease their risk.

This pamphlet explains

- *normal changes in the endometrium*
- *causes of endometrial hyperplasia*
- *risk factors*
- *signs and symptoms*
- *diagnosis*
- *treatment and prevention*

The Endometrium

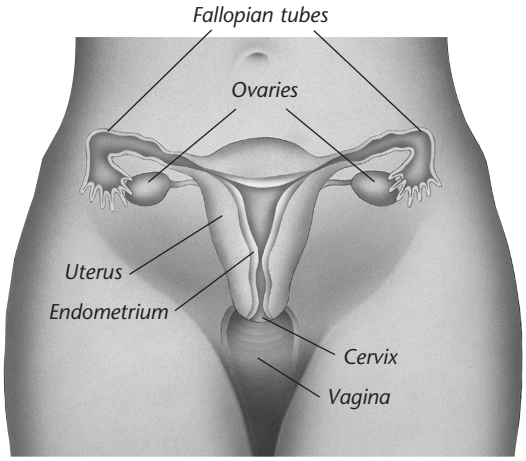
The endometrium changes throughout the ***menstrual cycle*** in response to ***hormones***. During the first part of the cycle, the hormone ***estrogen*** is made by the ***ovaries***. Estrogen causes the lining to grow and thicken to prepare the uterus for pregnancy. In the middle of the cycle, an egg 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.

Causes

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, can lead to cancer.

Female Reproductive System



The lining of the uterus is called the endometrium. Endometrial hyperplasia occurs when the endometrium grows too thick.

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. There may be high levels of estrogen and not enough progesterone in other situations, including when a woman

- uses medications that act like estrogen, such as ***tamoxifen*** for cancer treatment
- uses estrogen for hormone therapy and does not use progesterone or ***progestin*** if she still has a uterus
- has irregular ***menstrual periods***, especially associated with ***polycystic ovary syndrome (PCOS)*** or infertility
- has ***obesity***

Risk Factors

Endometrial hyperplasia is more likely to occur in women with certain risk factors. These risk factors include

- age older than 35
- never having been pregnant
- older age at menopause
- early age when menstruation started
- history of certain conditions (such as ***diabetes mellitus***, PCOS gallbladder disease, or thyroid disease)
- obesity
- cigarette smoking
- family history of ovarian, colon, or uterine cancer

Types

Doctors describe endometrial hyperplasia based on the type of cell changes in the uterine lining. There are three categories:

- Benign endometrial hyperplasia—cell changes in the lining that are not cancer
- ***Endometrial intraepithelial neoplasia (EIN)***—precancerous changes in the lining
- Endometrial adenocarcinoma, endometrioid type, well differentiated—cancerous changes in the lining.

Signs and Symptoms

The most common sign of hyperplasia is abnormal uterine bleeding. If you have any of the following, you should see your ***obstetrician-gyneoclogist (ob-gyn)***:

- 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

In most women with abnormal uterine bleeding, the cause is not cancer. If the cause is endometrial hyperplasia, treatment may be recommended to prevent cancer.

Diagnosis

There are many causes of abnormal uterine bleeding. If you have abnormal bleeding and you are 35 or older, or if you are younger than 35 and your abnormal bleeding has not been helped by medication, your ob-gyn 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 in a number of ways:

- ***Endometrial biopsy***—A biopsy of the endometrium can be done in an ob-gyn's office. A narrow tube is placed in the uterus. Tissue is taken from the lining. You may feel some cramping during the test. The cells that are collected are sent to a lab and checked under a microscope.
- ***Dilation and curettage (D&C)***—The opening of the ***cervix*** is enlarged (dilated). Tissue is gently scraped or suctioned from the uterine lining. The tissue is studied under a microscope. D&C may be done in an outpatient clinic, ob-gyn's office, or hospital. You may be given ***anesthesia*** to ease pain.

- ***Hysteroscopy***—A slender device like a telescope is placed in the uterus. With this device, your ob-gyn can look for places in the lining that may be abnormal. Cells are removed and sent to a lab for testing.

Treatment

The type of treatment you receive depends on several factors: the type of hyperplasia, your desire to become pregnant, your age, and other risk factors. In many cases, endometrial hyperplasia can be treated with progestin. You and your ob-gyn will find a form of the hormone and a dosage that is right for you. Progestin is given orally, in a shot, in an ***intrauterine device (IUD)***, 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.

After you have taken the hormone for a while, you may have another biopsy to see if the hyperplasia is responding to treatment. If it does not, more treatment may be needed. You may need a different kind of progestin or a different dosage.

If you have EIN changes in the lining, the risk of developing cancer is increased. ***Hysterectomy*** (removal of the uterus) may be a treatment option if you do not want another pregnancy. Talk with your ob-gyn about the right treatment for you.

Protecting Against Endometrial Hyperplasia

You can take steps to reduce the risk of endometrial hyperplasia. These steps may protect you if you have risk factors for this condition. They also can help keep the condition from coming back:

- If you take estrogen after menopause, you also need to take progestin or progesterone. Women who use vaginal estrogen creams or tablets may not need to take progestin or progesterone because the amount of estrogen in these forms is lower than that in pills or patches.
- If your periods are irregular, birth control pills 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.

Finally…

If you have abnormal bleeding, tell your ob-gyn. If the cause is endometrial hyperplasia, it can be treated. Women at risk of this condition also can take steps to protect against it.

Glossary

Anesthesia: Relief of pain by loss of sensation.

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

Cervix: The lower, narrow end of the uterus at the top of the vagina.

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

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.

Egg: The female reproductive cell made in and released from the ovaries. Also called the ovum.

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 Hyperplasia: A condition in which the lining of the uterus grows too thick.

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.

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

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

Hysterectomy: Surgery to remove the uterus.

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

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

Menstrual Cycle: The monthly process of changes that occur to prepare a woman's body for possible pregnancy. A menstrual cycle is defined as the first day of menstrual bleeding of one cycle to the first day of menstrual bleeding of the next cycle.

Menstrual Period: The monthly shedding of blood and tissue from the uterus.

Menstruation: The monthly shedding of blood and tissue from the uterus that happens when a woman is not pregnant.

Obesity: A condition characterized by excessive body fat.

Obstetrician-Gynecologist (Ob-Gyn): A doctor with special training and education in women's health.

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

Ovulation: The time when an ovary releases an egg.

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.

Tamoxifen: An estrogen-blocking medication sometimes used to treat breast cancer.

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

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

Vagina: A tube-like structure surrounded by muscles. The vagina leads from the uterus to the outside of the body.

This is EP147 in ACOG's Patient Education Pamphlet Series.

ISSN 1074-8601

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