

ABNORMAL UTERINE BLEEDING

The Menstrual Cycle

Each month the lining of the uterus, the endometrium, builds up and later sheds. This is known as the menstrual cycle. An average menstrual cycle lasts about 28 days, counting from the first day (day 1) of one period to the first day of the next. Cycles can vary from 23 to 35 days and still be normal. Bleeding may last up to 7 days. When the menstrual cycle is not regular, bleeding lasts longer or is heavier than normal, or bleeding occurs between periods, it is known as abnormal uterine bleeding.

During the menstrual cycle, the ovaries produce hormones that cause the endometrium to build up to prepare for a possible pregnancy. On about day 5 in an average cycle, the hormone estrogen signals the endometrium to grow and thicken. In an average 28-day cycle, on about day 14, an egg is released from one of the ovaries. This is called ovulation. The egg moves into one of the two fallopian tubes connected to the uterus. After ovulation, the hormone progesterone causes blood vessels in the endometrium to swell and other changes to occur. If an egg joins with a sperm in the fallopian tube, it is fertilized. The egg then becomes attached to the lining of the uterus and begins to grow. If the egg is not fertilized by a sperm, it breaks down and is absorbed by the body. Hormone levels decrease, and the endometrium is shed with some bleeding (menstruation) on about day 28. The start of menstruation marks the start of a new cycle (day 1).

Abnormal Uterine Bleeding may include:

- ❖ Absence of menstrual periods
- ❖ Bleeding between periods
- ❖ Bleeding after sexual intercourse
- ❖ Spotting
- ❖ Any change in normal flow

Causes of Abnormal Uterine Bleeding

It is normal for menstrual periods to be irregular at certain times of life. For the first few years after a girl begins to have periods (around age 12), they are often irregular. As women approach the age of 50, their periods once again may become irregular as they near menopause. Periods may become lighter or heavier because women at this age ovulate less often. Menstrual cycles that are longer than every 35 days (bleeding too seldom), or shorter than every 21 days (bleeding too often) are not normal. Women with such cycles should be checked by a doctor. There are many reasons why women may have abnormal or heavy uterine bleeding. They may be due to hormonal problems or they can be due to other conditions, both normal and abnormal. A hormone imbalance occurs when the body makes too much or too little of a certain hormone. It can be caused by weight loss or gain, heavy exercise, stress, illness, or use of some medications.

The most common result of a hormone imbalance is anovulation, when the ovaries do not release an egg and a woman does not have a period. Anovulation can cause endometrial hyperplasia. This is a condition in which the lining of the uterus grows too much. It occurs when the balance between progesterone and estrogen in the woman's body is disturbed. If left untreated over a long period of time, endometrial hyperplasia may occasionally turn into cancer. Anovulation may occur if the ovaries produce too much androgen, a male hormone. Frequently, when anovulation occurs, the ovaries develop many small cysts. This condition is known as polycystic ovarian syndrome. If you have more than one of these symptoms, you should see your doctor.

Symptoms of polycystic ovarian syndrome are:

- ❖ Irregular uterine bleeding or several months between periods
- ❖ Excessive facial hair or hair on the abdomen or chest
- ❖ Diabetes or glucose intolerance
- ❖ Infertility
- ❖ Acne

Other **causes** of abnormal uterine bleeding are:

- ❖ Pregnancy - Normal, Miscarriage, Ectopic pregnancy
- ❖ Uterine fibroids - Fibroids are muscle growths in the wall of the uterus present in 25- 50% of women
- ❖ Certain cancers - such as cancer of the uterus, cervix, or vagina
- ❖ Medical problems - such as hyperthyroidism and diabetes
- ❖ Problems with blood clotting
- ❖ Problems linked to some birth control methods
- ❖ Infection of the uterus or cervix

Diagnosis

To diagnose abnormal uterine bleeding, your doctor will first obtain your medical history. This will include information about any past illness and your use of medications and birth control. You will be asked about any change in your weight, eating and exercise habits, and level of stress. Your doctor will also ask about your menstrual periods. It is helpful for you to keep track of the dates and length of your periods by marking them on a calendar. You may also be asked to keep a daily record of your temperature, which can help show if you are ovulating.

Your doctor will then perform a complete physical exam. You may have blood tests to check your blood count and hormone levels and to see if you are pregnant. Other tests may also be needed based on your symptoms:

- ❖ Endometrial biopsy- a small amount of tissue is sampled from the lining of the uterus and looked at under a microscope.
- ❖ Ultrasound- sound waves are used to create a picture of the pelvic organs. The device may be placed on the abdomen or in the vagina.
- ❖ Hysteroscopy- a thin instrument is inserted through the vagina and cervix so the doctor can see the inside of the uterus.
- ❖ Laparoscopy- a slender instrument is inserted through a small cut just below or through the navel to allow the doctor to see the inside of the abdomen. This requires you to have an anesthetic.
- ❖ Dilation and Curettage (D&C)- the cervix is opened wider and tissue is gently scraped or suctioned from the lining of the uterus to be examined under a microscope.
- ❖ Hysterosalpingography- an X-ray procedure in which dye is injected into the uterus and fallopian tubes. It can help show whether the shape and size of the inside of the uterus are normal.

Some of these tests can be performed in the doctor's office. Others may be done in an outpatient surgery center with anesthesia.

Treatment

Treatment for abnormal bleeding will depend on the cause. You may be given hormones or other medications, or surgery may be needed.

Hormone Therapy

Your doctor may prescribe hormones, such as birth control pills, progesterone, or thyroid medication. These hormones will cause your periods to be more regular and may improve other symptoms. Progesterone can also help prevent and treat endometrial hyperplasia. It may take a few months for hormones to control abnormal bleeding. The type of hormone prescribed will depend on whether you want to become pregnant. After a few menstrual cycles, your doctor will be able to judge how well treatment is working. You may need to have some earlier tests repeated. If you think you might be pregnant, let your doctor know before you start any hormone therapy.

Other Medications

If you have an infection, you will be given antibiotics. Some medications, such as anti-inflammatory drugs (e.g. Ibuprofen), may be helpful for heavy bleeding. They may also be used to relieve menstrual cramps.

Surgery

Some women with abnormal uterine bleeding will have surgery to remove growths such as polyps or fibroids that are causing the bleeding. This may be done with hysteroscopy. The lining of the uterus can be removed by a technique called endometrial ablation. Endometrial ablation is intended to stop or reduce bleeding permanently and can be done with laser, electricity, freezing, or heat. Abnormal uterine bleeding may also be treated by hysterectomy which is removal of the uterus. This may be done when other forms of treatments have failed or are not an option. Hysterectomy and endometrial ablation are both surgeries that should never be done if you want to get pregnant in the future. You should be fully informed of all options before you decide on treatment.

Finally

If you notice that your cycles have become irregular, you should see your doctor. If you have gone through menopause and are not taking hormones, any uterine bleeding is abnormal. Increased bleeding as a woman approaches menopause is also abnormal. Abnormal uterine bleeding can stem from several causes. There is no way of telling why your bleeding is abnormal until your doctor examines you.