PATIENT EDUCATION

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

The Menopause Years

Menopause is the time in a woman's life when she naturally stops having menstrual periods. The years leading up to this point are called perimenopause. Menopause marks the end of the reproductive years. The average age of menopause for women in the United States is 51 years.

Perimenopause and menopause are natural events. Some women compare perimenopause to puberty—another time when the body undergoes major changes. You may have only a few symptoms, or you may have many. Knowing what to expect can make this natural transition easier.

Perimenopause: A Time of Change

During your childbearing years, monthly changes in two *hormones*—*estrogen* and *progesterone*—control your *menstrual cycle*. These hormones are made by the *ovaries*. Estrogen causes the *endometrium* (the lining of the *uterus*) to grow and thicken to prepare for a possible pregnancy. On about day 14 of your menstrual cycle, an egg is released from one of the ovaries, a process called *ovulation*. If the egg is not fertilized, no pregnancy occurs. This causes the levels of estrogen and progesterone to decrease, which signals the uterus to shed its lining. This shedding is your monthly period.

Beginning in your 30s and 40s, the ovaries make less estrogen. A common sign of perimenopause is a change in your menstrual cycle. Cycles may become longer than usual for you or become shorter. You may begin to skip periods. The amount of flow may become lighter or heavier. Although changes in menstrual bleeding are normal as you approach menopause, you still should report them to your health care professional. Abnormal bleeding may be a sign of a problem. Talk to your health care professional if you have any of the following:

- Bleeding between periods
- Bleeding after sex
- Spotting at anytime in the menstrual cycle
- Bleeding that is heavier or lasts for more days than usual
- Any bleeding after menopause

Removing the uterus (*hysterectomy*) ends menstrual periods, but it will not cause menopause unless the ovaries also are removed. Removing the ovaries *(oophorectomy)* causes immediate menopause signs and symptoms if it is done before a woman reaches menopause.

Signs and Symptoms

Menopause is different for everyone. Some women notice little change in their bodies. Others may find it difficult to cope with their symptoms.

Hot Flashes

Hot flashes are one of the most common symptoms of perimenopause. A hot flash is a sudden feeling of heat that rushes to the upper body and face. The skin may redden like a blush. You may break out in a sweat. A hot flash may last from a few seconds to several minutes or longer. Hot flashes are not harmful, but they sometimes are embarrassing and may interfere with daily life.

Some women have hot flashes a few times a month. Others have them several times a day. Hot flashes that happen at night (night sweats) may wake you up and cause you to feel tired and sluggish during the day.

Sleep Problems

Sleep problems are common in perimenopausal women. You may have insomnia (trouble falling asleep), or you may wake up long before your usual time. Night sweats may disrupt your sleep. It is not known if sleep changes are a part of growing older, the result of hormone changes, or a combination of both.

Vaginal and Urinary Tract Changes

As estrogen levels decrease, changes take place in the ***vagina***. Over time, the vaginal lining gets thinner, dryer, and less elastic. Vaginal dryness may cause pain during sex. Vaginal infections also may occur more often.

The urinary tract also changes with age. The ***urethra*** can become dry, inflamed, or irritated. Some women may need to urinate more often. Women may have an increased risk of urinary tract infections after menopause.

Skeletal and Other Changes

A small amount of bone loss after age 35 years is normal for both men and women. But during the first 4–8 years after menopause, women lose bone more rapidly. This rapid loss occurs because of the decreased levels of estrogen. If too much bone is lost, it can increase the risk of ***osteoporosis***. Osteoporosis increases the risk of bone fracture. The bones of the hip, wrist, and spine are affected most often.

The estrogen produced by women's ovaries before menopause protects against heart attacks and stroke. When less estrogen is made after menopause, women lose much of this protection. Midlife also is the time when risk factors for heart disease, such as high cholesterol levels, high blood pressure, and being physically inactive, are more common. All of these factors combined increase the risk of heart attack and stroke in menopausal women.

Hormone Therapy

Hormone therapy can help relieve the symptoms of perimenopause and menopause. Hormone therapy means taking estrogen and, if you have never had a hysterectomy and still have a uterus, ***progestin***. Progestin is a form of progesterone. Taking progestin helps reduce the risk of cancer of the uterus that occurs when estrogen is used alone. If you do not have a uterus, estrogen is given without progestin. Estrogen plus progestin sometimes is called "combined hormone therapy" or simply "hormone therapy." Estrogen-only therapy sometimes is called "estrogen therapy."

Estrogen can be given in several forms. Systemic forms include pills, skin patches, and gels and sprays that are applied to the skin. If progestin is prescribed, it can be given separately or combined with estrogen in the same pill or in a patch. With systemic therapy, estrogen is released into the bloodstream and travels to the organs and tissues where it is needed. Women who only have vaginal dryness may be prescribed "local" estrogen therapy in the form of a vaginal ring, tablet, or cream. These forms release small doses of estrogen into the vaginal tissue.

Benefits

Systemic estrogen therapy (with or without progestin) has been shown to be the best treatment for the relief of hot flashes and night sweats. Both systemic and local types of estrogen therapy relieve vaginal dryness. Systemic estrogen protects against the bone loss that occurs early in menopause and helps prevent hip and spine fractures. Combined estrogen and progestin therapy may reduce the risk of colon cancer.

Risks

As with any treatment, hormone therapy is not without risks. Hormone therapy may increase the risk of certain types of cancer and other conditions:

- Estrogen therapy causes the lining of the uterus to grow and can increase the risk of uterine cancer. Adding progestin decreases the risk of uterine cancer.
- Combined hormone therapy is associated with a small increased risk of heart attack. This risk may be related to age, existing medical conditions, and when a woman starts taking hormone therapy. Some research suggests that for women who start combined therapy within 10 years of menopause and who are younger than 60 years, combined therapy may protect against heart attacks. However, combined hormone therapy should not be used solely to protect against heart disease.
- Combined hormone therapy and estrogen-only therapy are associated with a small increased risk of stroke and ***deep vein thrombosis (DVT)***. Forms of therapy not taken by mouth (patches, sprays, rings,

and others) may have less risk of causing deep vein thrombosis than those taken by mouth.

- Combined hormone therapy is associated with a small increased risk of breast cancer. Currently, it is recommended that women with a history of hormone-sensitive breast cancer try nonhormonal therapies first for the treatment of menopausal symptoms.
- There is a small increased risk of gallbladder disease associated with estrogen therapy with or without progestin. The risk is greatest with oral forms of therapy.

Deciding to Take Hormone Therapy

Before making a decision about hormone therapy, talk to your health care professional about what may work best for you based on your symptoms and your personal and family medical history. In general, hormone therapy use should be limited to the treatment of menopausal symptoms at the lowest effective dose for the shortest amount of time possible. Continued use should be reevaluated on a yearly basis. Some women may require longer therapy because of persistent symptoms.

Other Therapies

Many women are interested in therapies other than hormone therapy to treat menopause symptoms. The following are some alternatives to hormone therapy:

- Medications—Several ***antidepressants*** are available for the treatment of hot flashes. Gabapentin, an antiseizure medication, and clonidine, a blood pressure medication, are drugs that can be prescribed to reduce hot flashes and ease sleep problems associated with menopause. Selective estrogen receptor modulators (SERMs) are drugs that act on tissues that respond to estrogen. SERMs are available for the relief of hot flashes and pain during intercourse caused by vaginal dryness.
- Plant-based alternatives—Plants and herbs that have been used for relief of menopause symptoms include soy, black cohosh, and Chinese herbal remedies. Only a few of these substances have been studied for safety and effectiveness. Also, the way that these products are made is not regulated. There is no guarantee that the product contains safe ingredients or effective doses of the substance. If you do take one of these products, be sure to let your health care professional know.
- Bioidentical hormones—Bioidentical hormones come from plant sources. They include commercially available products and compounded preparations. Compounded bioidentical hormones are made by a compounding pharmacist from a health care professional's prescription. Compounded drugs are not regulated by the U.S. Food and Drug Administration (FDA). Compounding pharmacies must be licensed, but they do not have to show the safety, effectiveness, and quality control that the FDA requires of drug makers. The American College of Obstetricians and Gynecologists recommends FDA-approved hormone therapy over compounded hormone therapy.
- Vaginal moisturizers and lubricants—These over-the-counter products can be used to help with vaginal dryness and painful sexual intercourse. They do not contain hormones, so they do not have an effect on the vagina's thickness or elasticity. You can use a moisturizer every 2–3 days as needed. Lubricants can be used each time you have sexual intercourse. There are many types of lubricants. Water-soluble lubricants are easily absorbed into the skin and may have to be reapplied frequently. Silicone-based lubricants last longer and tend to be more slippery than water-soluble lubricants. Oil-based lubricants include petroleum jelly, baby oil, or mineral oil. Oil-based lubricants should not be used with latex condoms because they can weaken the latex and cause the condom to break.

Staying Healthy

Most women today can expect to live 20–30 years after menopause. A healthy lifestyle can help you make the best of these years.

Good Nutrition

Eating a balanced diet will help you stay healthy before, during, and after menopause. It is important to eat a variety of foods to make sure you get all the essential nutrients. Choose a diet low in saturated fats. Be sure to include enough calcium in your diet to help maintain strong bones. Women aged 19–50 years need 1,000 mg of calcium a day. Women aged 51 years and older need 1,200 mg of calcium a day. Milk and other dairy foods are good sources.

Vitamin D helps the body absorb calcium. Women should get 600–800 international units of vitamin D daily. The best sources of vitamin D are fatty fish such as salmon and tuna.

Exercise

Exercise is very important, especially as you get older. Regular exercise slows down bone loss and improves your overall health. Weight-bearing exercise, such as walking, can help keep bones strong. Strength training also is good for bones. In this type of exercise, muscles and bones are strengthened by resisting against weight, such as your own body, an exercise band, or handheld weights. Balance training, such as yoga and tai chi, may help you avoid falls, which could lead to broken bones.

Regular Health Care

Routine health care, even if you are not sick, can help detect problems early. It also gives you and your health care professional a chance to talk about ways to avoid problems later in life. You should visit your health care

professional once a year to have regular exams and tests. Dental checkups and eye exams are important, too.

Finally...

Menopause is a natural event. It is a good idea to approach menopause fully informed and with a positive mind-set. Most women go through menopause without major problems. But, if you are bothered by menopause signs and symptoms, many treatment options are available. Adopting a healthy lifestyle and seeing your health care professional on a regular basis also can help you thrive during this time of your life.

Glossary

Antidepressants: Drugs that are used to treat depression.

Deep Vein Thrombosis (DVT): A condition in which a blood clot forms in veins in the leg or other areas of the body.

Endometrium: The lining of the uterus.

Estrogen: A female hormone produced in the ovaries.

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.

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.

Oophorectomy: Surgery to remove an ovary.

Osteoporosis: A condition of thin bones that could allow them to break more easily.

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.

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.

Puberty: The stage of life when the reproductive organs start to function and other sex features develop. For women, this is the time when menstrual periods start and the breasts develop.

Urethra: A tube-like structure. Urine flows through this tube when it leaves the body.

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

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

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