

# When the Patient Asks

ADRIENNE D. MILLER

## Q: Is hormone replacement therapy for me?

Physicians started treating perimenopause symptoms in women with short courses of hormone replacement therapy (HRT) in the 1940s. When HRT demonstrated that it could protect women from osteoporosis, cardiovascular disease, and other age-related ailments, physicians started prescribing long-term HRT for all women who were postmenopausal.<sup>1</sup> By 1995, approximately 38% of postmenopausal women in the United States were taking HRT to treat menopausal symptoms and decrease the risk of chronic conditions.<sup>2</sup>

In 1993, the National Institutes of Health commenced the Women's Health Initiative (WHI). The study was halted in 2002 because the investigators found an increased risk of breast cancer, heart attack, stroke, and blood clots in women taking HRT and an increased risk of ovarian cancer in women taking estrogen therapy.<sup>1</sup> However, current research shows that when administered with careful supervision, HRT can safely relieve many symptoms of perimenopause.<sup>1,5</sup> Most commonly, HRT is an effective treatment for hot flashes, atrophic vaginitis, and postmenopausal osteoporosis.<sup>5,8</sup>

### ► BENEFITS OF TREATMENT

**Hot flashes** A common vasomotor symptom, hot flashes improve within several months in 30% to 50% of women and usually resolve completely within 4 to 5 years after the onset of menopause.<sup>4</sup> Conjugated equine estrogen and medroxyprogesterone acetate (Depo-Provera, Provera, generics) were shown to improve hot flashes and sleep disturbances in women aged 50 to 54 years.<sup>5</sup>

**Atrophic vaginitis** The decrease in estrogen during menopause causes atrophic vaginitis, which leads to dryness, irritation, itching, soreness, dys-

pareunia, and discharge. In a study of the efficacy of low-dose estradiol vaginal tablets for the treatment of atrophic vaginitis, doses of 10 mcg and 25 mcg were found to improve atrophy, relieve vaginal symptoms, decrease vaginal pH, and increase maturation of the vaginal epithelium.<sup>6</sup> Whereas greater improvements were seen with 25 mcg, both doses were effective for treating vaginal atrophy in postmenopausal women.<sup>6</sup>

**Osteoporosis** The WHI studied 16,608 women aged 50 to 79 years to determine if estrogen and progestin HRT can reduce the risk of hip, vertebral, and wrist fractures. Bone mineral density (BMD) of the hip and lumbar spine were measured at baseline, and at 1, 3, and 6 years.<sup>7</sup> Study conclusions showed that HRT can significantly improve BMD and reduce fracture risk regardless of age, personal or family history, tobacco or alcohol use, or fracture risk rates.<sup>7</sup>

**Colorectal cancer** As part of the WHI, Chlebowski and colleagues analyzed the risk of colorectal cancer in women who were taking HRT and women who were not taking HRT.<sup>8</sup> Chlebowski's group concluded that HRT use was associated with a statistically significant decrease in the incidence of colorectal cancer in perimenopausal women because of the chemical properties of estrogen.<sup>8</sup> However, HRT can also delay the diagnosis of colorectal cancer, thus emphasizing the importance of bowel screening in these women as well as a thorough discussion of the benefits and risks before prescribing HRT.

### ► BOTTOM LINE

HRT is effective for perimenopausal women who do not have contraindications for estrogen therapy. Contraindications include abnormal vaginal

bleeding, thromboembolic disease, breast cancer, other estrogen-sensitive cancers, or liver disease.<sup>4</sup> The recommended dosage is the lowest effective dose for the shortest duration. If the uterus is still present, combination estrogen and progestin or progesterone must be prescribed to prevent endometrial hyperplasia or cancer.<sup>4</sup>

The risk-to-benefit ratio increases after menopause; therefore, recommendations are to discontinue HRT 2 to 3 years after the onset of menopause. As long as the patient's symptoms do not return, dosage can be tapered by reducing the daily dose or decreasing the number of doses per week.<sup>4</sup> JAAPA

Adrienne Miller is a student at Eastern Virginia Medical School, Norfolk, Virginia. She has indicated no relationships to disclose relating to the content of this article.

Mary Hewett, MS, PA-C, department editor

### REFERENCES

- Canderelli R, Leccese L, Miller NL, Unruh Davidson J. Benefits of hormone replacement therapy in postmenopausal women. *J Am Acad Nurse Pract.* 2007;19(12):635-641.
- Nelson HD. Commonly used types of postmenopausal estrogen for treatment of hot flashes: scientific review. *JAMA.* 2004;291(13):1610-1620.
- American College of Obstetricians and Gynecologists (ACOG). Frequently asked questions about hormone replacement therapy. October 2004. ACOG Web site. [http://www.acog.org/from\\_home/publications/press\\_releases/nr10-01-04.cfm](http://www.acog.org/from_home/publications/press_releases/nr10-01-04.cfm). Accessed June 9, 2009.
- Nelson HD. Postmenopausal estrogen for treatment of hot flashes: clinical applications. *JAMA.* 2004;291(13):1621-1625.
- Hayes J, Ockene JK, Brunner RL, et al; Women's Health Initiative Investigators. Effects of estrogen plus progestin on health-related quality of life. *N Engl J Med.* 2003;348(19):1839-1854.
- Bachmann G, Lobo RA, Gut R, et al. Efficacy of low-dose estradiol vaginal tablets in the treatment of atrophic vaginitis: a randomized controlled trial. *Obstet Gynecol.* 2008; 111(1):67-76.
- Rossouw JE, Anderson GL, Prentice RL, et al; Writing Group for the Women's Health Initiative Investigators. Risks and benefits of estrogen plus progestin in healthy postmenopausal women: principal results from the Women's Health Initiative randomized controlled trial. *JAMA.* 2002;288(3):321-333.
- Chlebowski RT, Wactawski-Wende J, Ritenbaugh C, et al; Women's Health Initiative Investigators. Estrogen plus progestin and colorectal cancer in postmenopausal women. *N Engl J Med.* 2004;350(10):991-1004.

# Patient Information

## Q: Is hormone replacement therapy for me?

### ›WHAT IS HORMONE REPLACEMENT THERAPY?

Hormone replacement therapy (HRT) is a treatment used to maintain your hormone levels when you begin menopause.

### ›WHAT IS MENOPAUSE?

Menopause is the time in a woman's life when her period stops. Production of the hormones estrogen and progesterone starts to decrease. This change occurs when a woman is age 45 to 55 years. Lower levels of these hormones can cause symptoms that may become uncomfortable.

### ›WHAT ARE THE SYMPTOMS OF MENOPAUSE?

The main symptom is that your period will stop. Some women do not have any other symptoms. Additional symptoms are hot flashes, which make you get very warm in the face, neck, and chest. At night, you may sweat a lot and have trouble sleeping.

Your period may not stop right away. The time between periods and the flow may be different each month until your period stops. Your vagina may become dry. You may also feel discomfort when having sex.

### ›WHAT TYPES OF HRT ARE AVAILABLE?

The hormone that HRT replaces is estrogen. HRT may also include progesterone. HRT is available in several forms. Your PA or doctor may prescribe HRT in the form of a pill. HRT is also available as a patch, a gel, or a cream. Some types of HRT are available as a ring that is inserted into your vagina. HRT is usually used for 5 to 7 years. This is called *short-term* HRT. HRT is considered *long-term* when you take hormones for more than 5 to 7 years.

### ›WHAT ARE THE BENEFITS OF HRT?

HRT keeps your hormone levels high enough to relieve menopause symptoms. Hot flashes and night sweats may be uncomfortable. HRT can reduce or prevent these symptoms. HRT can also protect you from developing osteoporosis and colorectal cancers. Short-term HRT has more benefits than side effects.

### ›WHAT ARE THE SIDE EFFECTS OF HRT?

All medications have side effects. Scientists have found that women who take long-term HRT may have a slightly higher risk of developing heart disease or having a stroke.

Long-term therapy can also increase the chance of developing blood clots, breast cancer, and ovarian cancer. Side effects can be limited by using the lowest dose of estrogen that will relieve your symptoms for the shortest amount of time.

### ›WHO SHOULD USE HRT?

If your menopause symptoms are extremely uncomfortable, your PA or doctor may prescribe HRT for you. HRT that has only estrogen is prescribed if you have had a hysterectomy. If you have not had a hysterectomy, you should use an HRT that is a combination of estrogen and progesterone. This combination can protect against uterine cancer. HRT is started at the beginning of menopause. Your PA or doctor will prescribe the smallest dose of estrogen that will relieve your symptoms. The HRT dose is slowly reduced during the next 5 years.

### ›WHO SHOULD NOT USE HRT?

If you have a history of breast cancer or ovarian cancer, you should not use HRT. If you have heart disease, you

should not use HRT. If you have had blood clots or a stroke, you should not use HRT. You should not use HRT if you no longer have menopause symptoms. HRT should not be used for more than 5 to 7 years. If you are older than 65 years, you should not be using HRT.

### ›DOES IT MATTER WHICH TYPE OF THERAPY I USE?

The risks and benefits may be the same for all forms of hormone therapy used to treat the symptoms of menopause. Your PA or doctor can help you decide if one type might be better for you than the others.

### ›HOW LONG SHOULD I USE HORMONES FOR MENOPAUSE?

HRT should be used at the lowest dose that will relieve your symptoms and for the shortest amount of time. You may need to visit your PA or doctor every 3 to 6 months to check if you still need HRT.

### ›DO HORMONES PREVENT AGING, HEART ATTACKS, OR ALZHEIMER'S DISEASE?

HRT has not been proven to prevent aging or wrinkles. HRT should not be used to prevent heart attacks or strokes. HRT should not be used to prevent memory loss or Alzheimer's disease.

### ›BOTTOM LINE

HRT can be helpful in relieving menopause symptoms. You should always talk with your PA or doctor to determine the best treatment for your menopause symptoms. You can find information on HRT on the Internet. The National Institutes of Health has a lot of information about HRT (go to [www.nlm.nih.gov/medlineplus/hormonereplacementtherapy.html](http://www.nlm.nih.gov/medlineplus/hormonereplacementtherapy.html)). **JAAPA**

