

# W o m e n ' s HEALTH UPDATES



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## Premature and Surgical Menopause

**A**s if there weren't enough confusion over the issue of hormone therapy after menopause, imagine how women who reach menopause unusually early feel. Without the estrogen their bodies would normally make for another decade or more, they face a significant risk of bone loss, heart disease and long-term menopausal symptoms.

In this Women's Health Update, we bring the issue of premature menopause into focus, explaining what it is, what it means and the various options women face as they evaluate health issues that will affect them for the rest of their lives.

### **Fact 1.** [Menopause is considered premature if it occurs before age 40.](#)

Normal menopause occurs around age 51 for most American women but may occur as early as 45 and as late as 55. About one percent of women experience premature ovarian failure (POF), in which their ovaries stop working, sending them into premature menopause. The term is used when a woman has stopped menstruating for three months or more and has high levels

of certain hormones, like follicle stimulating hormone (FSH) and luteinizing hormone (LH), and low estrogen levels similar to those seen in postmenopausal women.<sup>1</sup> Of the approximately 700,000 women who have experienced premature ovarian failure, about 120,000 are under 40.<sup>2</sup>

Another 36,000 women under age 45 have total hysterectomies each year, in which their ovaries are removed, plunging them into "surgical menopause."<sup>3</sup>

While premature menopause can increase your risk of cardiovascular disease and osteoporosis, it may decrease your risk of certain hormone-related cancers, such as breast and ovarian cancer.<sup>4</sup>

### **Fact 2.** [Premature menopause may result from numerous causes.](#)

Among them are medical reasons, including genetic abnormalities such as Turner's syndrome and other chromosomal abnormalities; autoimmune conditions such as lupus, diabetes and rheumatoid arthritis; and certain kidney or liver conditions. Premature menopause may also result from endometriosis or sponta-

neous ovarian failure (in which the ovaries mysteriously stop working). Surgically removing the ovaries leads to premature menopause, as can pelvic or whole body radiation and certain chemotherapies, particularly cyclophosphamide.<sup>5</sup>

### **Fact 3.** [Premature menopause from ovarian failure differs from surgical menopause.](#)

While both result in the end of your periods, premature menopause typically occurs in a gradual manner, much like natural menopause. Even after menopause, the ovaries continue to produce substantial amounts of androgens, which contribute to sexual function and are converted into estrogen. With surgical menopause, however, the sudden (and permanent) drop in estrogen and androgens contribute to often severe menopausal symptoms. These include hot flashes, fatigue, sexual dysfunction, depression, migraine headaches, vaginal dryness and cardiovascular symptoms. Some hot flashes are so severe they interfere with a woman's ability to function.<sup>2</sup>

### **Fact 4.** [Premature menopause is not always permanent.](#)

About half of women whose ovaries appear to stop working still have some ovarian function, although it's not consistent. In fact, about one out

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of four may continue to ovulate, and studies find that six to eight percent may actually get pregnant even after they've been diagnosed with premature menopause. Younger women whose menopause is caused by chemotherapy or radiation are more likely to resume ovulating than older women.<sup>1</sup> If you take hormone therapy after premature menopause and still have your ovaries, talk to your health care professional about contraception.

### **Fact 5.** Hormone therapy is usually required after premature menopause.

Most women who experience surgical menopause require hormone therapy to manage their symptoms and protect them from an increased risk of heart disease and osteoporosis. Some take supplemental hormone therapy for the rest of their lives to manage their symptoms.<sup>2,6</sup> Meanwhile, health care professionals recommend that women who experience premature menopause from other causes remain on estrogen therapy until at least age 50, when their natural estrogen levels would have dropped anyway.<sup>4</sup>

Most women with premature menopause receive their estrogen therapy in the form of low-dose birth control pills. Although oral contraceptives are generally safe,

there are few studies on their long-term use in women with premature menopause.<sup>7</sup> Women may also take estrogen in the form of estrogen therapy, with or without progesterone (progesterone is typically prescribed with estrogen if you still have your uterus to prevent endometrial cancer). Again, there is no information on the long-term risks and benefits of this form of hormone therapy in women with premature menopause.

The only major studies on postmenopausal estrogen therapy were conducted in women after they reached natural menopause. While those studies showed a slight increased risk in heart disease, breast cancer, stroke, ovarian cancer and blood clots for some women taking combined estrogen/progesterone therapy,<sup>8,9</sup> experts warn against assuming similar results in women with premature menopause.<sup>6</sup>

Women who undergo surgical menopause may also need testosterone therapy, particularly if they find they're tired, have little energy and experience a loss of sexual desire even after starting estrogen therapy.<sup>7</sup>

## **Heart Disease and Premature Menopause**

Regardless of the cause, any form of premature menopause places women at a much higher risk for coronary heart disease (CHD).<sup>10</sup> While estrogen therapy is no longer recommended to prevent cardiovascular disease in women who reach menopause naturally, the issue is not so clear in women with premature menopause.

One large population-based study of 127,000 nurses found that women

who had surgical menopause and never took estrogen were 2.2 times more likely to develop CHD than women who reached natural menopause and never took estrogen. Taking estrogen, however, eliminated this increased risk in women with premature menopause.<sup>11</sup>

There is also some evidence that even short-term use of estrogen therapy after surgical menopause can improve levels of several markers for CHD.<sup>12</sup> However, one small study found that while women with surgical menopause saw significant improvements in total cholesterol levels and levels of HDL cholesterol ("good" cholesterol) after six weeks on estrogen therapy, they also had significant increases in their average LDL ("bad" cholesterol) levels, a risk factor for heart disease.<sup>13</sup>

In addition to any medication your health care professional recommends, you should follow a heart-healthy lifestyle. This includes maintaining a healthy weight, eating a diet high in fruits, vegetables, whole grains and lean protein (like fish, chicken and soy) and limiting the amount of fat in your diet, particularly saturated fat. You should also exercise regularly (30 to 60 minutes a day three or more days a week is ideal), learn to manage stress so it doesn't manage you and quit smoking if you smoke.

## **Osteoporosis and Premature Menopause**

As with CHD, women who undergo premature menopause have a much higher risk of developing the bone-thinning disease osteoporosis than women who reach menopause naturally.<sup>2</sup> For years, health care professionals prescribed estrogen therapy to younger women who experienced

early menopause as a way of protecting their bones. Estrogen slows the action of cells called osteoclasts, which break down bone. That's why bone tends to thin fastest after menopause, when estrogen levels drop. And that's why it's so important that women who reach menopause earlier than normal find some way to protect their bones.

Today, in addition to supplemental estrogen, health care professionals have several other medications to prevent and treat osteoporosis in high-risk women. Talk to your health care professional about which is best for you.

As with CHD, you can make several lifestyle changes to reduce your risk of osteoporosis. These include regular weight-bearing exercise (walking and gardening work great), quitting smoking and getting enough calcium and vitamin D (1,200 mg of calcium a day and 400 IU of vitamin D a day) either through diet or supplements.

## Sexual Function and Premature Menopause

Premature menopause, particularly surgical menopause or that resulting from chemotherapy and/or radiation, significantly reduces your body's production of androgens—often quite suddenly. This, in turn, may significantly affect your sexual drive and function. In fact, researchers find that at least half of women who undergo surgical menopause report a decrease in sexual desire.<sup>14</sup> Additionally, the drop in estrogen after premature menopause may lead to vaginal changes such as dryness, making intercourse painful. Both estrogen and testosterone therapy can help manage these conditions,

with studies finding they work better together than either alone for sexual issues.<sup>15-18</sup>

Although there is no U.S. Food and Drug Administration (FDA)-approved form of testosterone for treating sexual disorders in women, there are a few testosterone-containing products that are approved for use in men and/or women for other indications, including pills, patches, creams and gels. Typically, health care professionals prescribe these compounds “off label,” a perfectly legal thing to do. There also is an estrogen/testosterone combination product available for women.

Generally, there are few, if any, side effects from small amounts of testosterone. One possible side effect with oral testosterone is reduced levels of “good” cholesterol, or HDL. But this isn't seen with the patches, gels or creams. There are also some reports that higher levels of testosterone could lead to acne and hair growth (in places you don't want hair) in women. But if you're taking testosterone, your doctor will monitor you closely for any potential side effects.<sup>19</sup>

## Understanding Natural Hormone Therapy

With all the bad news about hormone therapy over the past few years, many women have sought out other alternatives, including so-called “natural” herbal products and “bioidentical” hormones. When something is “bioidentical,” it is structurally identical to the substance as it naturally occurs in your body. For treating menopausal symptoms, bioidentical estrogen (known as estradiol) and a bioidenti-

cal progesterone (micronized progesterone) are available.

Hormone therapy requires a prescription from your health care professional. It may be filled in two ways: with an FDA-approved commercially available product or with a product mixed on an individual basis for women in compounding pharmacies.

Compounded products are not FDA-approved. Herbal products, which are available without a prescription and claim to relieve a variety of menopause-related symptoms, are not FDA-approved either.

If you choose to have your bioidentical hormones custom-made for you in a compounding pharmacy, you need to understand that their production, the purity of the product and the safety of the dose designed for you are unregulated. Additionally, no safety or efficacy studies (i.e., studies showing how well the drug works) have been conducted or published. While these formulations may use FDA-approved ingredients, the customized formulations are not approved, and there are no guidelines for their use.<sup>20</sup>

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## Questions to Ask Your Health Care Professional

1. Why should I take this hormone therapy (HT)?
2. Which HT delivery method is right for me?
3. Will I need supplemental testosterone?
4. What form of testosterone should I use?
5. Are there any side effects from any of these hormone therapies?
6. How can I manage my increased risks for osteoporosis and heart disease?
7. Could you please review the term "bioidentical" with me?
8. How long will I need to take hormone therapy?
9. Are there other treatments for my menopausal symptoms?

Pharmaceutical bioidentical products, however, are subjected to a rigorous review of their benefits and health risks before they can be marketed. They are only allowed on the

market if the benefits outweigh the risks. Additionally, the quality of pharmaceutical estrogens and progesterone are regulated by the federal government.

## Resources

### International Premature Ovarian Failure Association

703-913-4787

[www.pofsupport.org](http://www.pofsupport.org)

Provides information and support on premature ovarian failure.

### National Institutes of Health Postmenopausal Hormone Therapy Information

[www.nih.gov/PHTindex.htm](http://www.nih.gov/PHTindex.htm)

Provides resources and links on hormone replacement therapy, women's health and menopause.

### National Women's Health Resource Center

1-877-986-9472

[www.healthywomen.org](http://www.healthywomen.org)

Online resources and print materials available.

### North American Menopause Society

440-442-7550

[www.menopause.org](http://www.menopause.org)

Consumer information includes Menopause Guidebook, available online and via mail.

### National Association of Nurse Practitioners in Women's Health

202-543-9693

[www.npwh.org](http://www.npwh.org)

Provides consumer information about various women's health issues.

### American Menopause Foundation

[www.americanmenopause.org](http://www.americanmenopause.org)

Independent, not-for-profit health organization dedicated to providing support and assistance on all issues concerning menopause.

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