



Menopause and Hormones Is It All Madness?

By Michelle M. Herron, M.D.

Although menopause is a natural biological process and not a medical illness, its symptoms can literally take control of a woman's life. Menopause affects every woman differently, but most women have symptoms such as hot flashes, mood swings, sleep disturbances, changes in sexual interest, and mental fogginess. A multi-pronged approach to treatment that includes diet changes, medication, and exercise can help women feel better about embracing the "change."

Iwonder just how many middle-aged women have flocked to see *Menopause, the Musical* or glued themselves to their televisions for Oprah's recent episodes regarding menopause and hormone "replacement" therapy. How many of us are familiar with Suzanne Somer's infamous "seven dwarfs of menopause" – itchy, bitchy, sleepy, sweaty, bloated, forgetful, and all dried up? Menopause, or more properly, the menopause transition, has clearly been "established" as the most difficult time in many women's lives (yes, even worse than adolescence) Do we laugh or do we cry? (I suppose it's actually a little bit of both!) More importantly, what can be done about it?

What is it?

Menopause, by definition, is twelve months of amenorrhea (no periods) at a time in a woman's life when the ovaries stop producing eggs and therefore estrogen; aka reproduc-

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tive senescence. The average age of menopause in the U.S. is 51.4 although 5 percent of the time it occurs after age 55 and another 5 percent between 40-45. Menopause prior to age 40 is considered premature ovarian failure. Unlike menarche/puberty which is often affected by nutritional status (body mass index) and general health, the average age of menopause has been relatively unchanged over time. It is largely genetically determined and is often earlier in women who smoke, have had a hysterectomy and have never had children. Perimenopause is part of the menopause transition that is divided into early and late stages and can last a total of two to six years or more. The symptoms of perimenopause and early menopause can literally take control of a woman's life and truly make her feel as if she is going "mad."

In 1966, in his book "Feminine Forever," Dr. Robert Wilson wrote "the lack of estrogen at menopause led inevitably to the shriveling of a woman's body leaving her old and decrepit." The late transition is a time of striking fluctuations in serum FSH (follicle stimulating hormone) and Estradiol levels. At one moment there is a relative excess of estrogen and deficiency of progesterone that rapidly swings to the opposite. Symptoms include vasomotor instability (the notorious hot flashes and night sweats), irregular vaginal bleeding, vaginal dryness and dyspareunia (painful intercourse), decreased libido, sleep disturbances, urinary incontinence, mood swings with irritability and depression, worsening of

migraine headaches, joint pain, skin changes, and that ever-so-unpleasant mental "fogginess."

The Heat is Killing Me

Vasomotor symptoms are by far the most common menopausal symptom. The hot flash is the "sine qua non" for the menopausal transition. Hot flashes occur in 14-51 percent of women prior to perimenopause, 30-50 percent during perimenopause, and 30-80 percent after menopause. They persist in 12-15 percent of women in their 60s and 9 percent of women after age 70. Hot flashes represent thermoregulatory dysfunction, starting in the hypothalamus of the brain when triggered by estrogen withdrawal. There is increased blood flow peripherally from blood vessel vasodilation resulting in rapid heat loss, a drop in core body temperature, and shivering as a mechanism to restore temperature. The SWAN study showed that Asian women were overall less affected and African-American women more affected by these symptoms than were their Caucasian counterparts. Women who smoke and those who have a higher BMI are more affected. In atypical or extreme cases of hot flashes or night sweats, rare etiologies such as cancer, HIV, infection, carcinoid, pheochromocytoma, and medication side effects should be ruled out.

Anti-depressants, which are commonly taken during this time frame, are the number one medication to cause sweats. Night sweats tend to occur in the first four hours of sleep rather than in the next four hours of REM sleep. Chronic insomnia can ensue resulting in increased irritability and depression. Primary sleep disorders such as sleep apnea and restless leg syndrome must be ruled out in more severe cases. Reducing the ambient temperature to 64 degrees, using a fan, and wearing layered clothing during the day may be beneficial. Hypothyroidism can be increasingly seen in this age group and should always be ruled out.

Hormone Therapy (HT) - Friend or Foe?

In 1949, Premarin, made synthetically from the urine of pregnant mares, became "queen of the hormone replacement world" as the first truly effective treatment of the dreaded vasomotor symptom. In the late 1970s, estrogen was linked with an increase in uterine/endometrial cancer and the role of progesterone in HT simply to protect the uterus was established. Premarin sales reached an all time high in the late 1980s and early 1990s. Millions of women took HT either as a combination of estrogen and progesterone (E+P), or as estrogen alone if they had had a hysterectomy, to treat menopausal symptoms, protect their bones, decrease their LDL cholesterol, and even protect them from cardiovascular disease. Many observational studies to this point suggested a very beneficial

Natural Options for Relieving the Symptoms of Menopause

Many women choose to utilize “natural” methods or alternative therapies to help them take back control of their lives.

Eating a healthy diet. A healthy diet and nutritional supplements are a great start, including fruits, vegetables, and even organic foods.

Fluid Intake. Drink 32-48 ounces of water daily, beginning to taper consumption three hours before bed to avoid nocturia (frequent night time urination).

Vitamin supplements. A good multivitamin, B-complex vitamin, Vitamin C, Calcium 600mg 2x/day and 1000 I.U. of Vitamin D3 are all essential to help maintain bone health at a time when waning estrogen levels lead to an exponential loss in bone mineral density (BMD) and an increased fracture risk.

Healthy lifestyle choices. Don't smoke. Use alcohol in moderation. Avoid spicy foods. Limit caffeine. Reduce stress. Try acupuncture or yoga.

Exercise, exercise, exercise. Find some aerobic activity you like to do and perhaps an exercise buddy and you are more apt to stick with it.

Alternative therapies. Many women turn to herbal supplements. Phytoestrogens including isoflavones are found in soybeans, chickpeas, and lentils. In addition to soy in the diet or as a supplement, black cohosh, red clover, dong quai, or chasteberry can be tried although research has failed to prove any of these more effective than placebo. Risks can also be involved.

Medication. Certain antidepressants and a medicine called gabapentin (Neurontin) have been used with some success to treat hot flashes especially in breast cancer survivors who are not hormone therapy eligible.

effect of estrogen on blood vessels and thus as coronary heart disease (CHD) prevention. However, the Heart and Estrogen/ Progestin Replacement Study came along in 1998, which included postmenopausal women with established cardiovascular disease, and showed that combination HT (E+P) actually increased cardiovascular risk in the first year of use.

Following this, the first randomized, placebo-controlled \$628 million trial, known as the Women's Health Initiative and conducted by the National Institutes of Health in women aged 50-79, came to a screeching halt in July, 2002, after slightly more than five years. The study was stopped prematurely because it showed an increase risk of breast cancer, heart disease, stroke, and blood clots with E+P use. Two years later, the estrogen only arm of the study was stopped early after seven years because of an increased cardiovascular risk seen in these women.

The media then rapidly and rather inappropriately had a field day with this information and women all over the U.S. on their own or on secondary doctor's advice stopped their HT abruptly. Fifty-five percent of these women had recur-

rent symptoms. What the media initially failed to report was that the average age of the 27,347 women in the study was 63 and the majority were greater than ten years after their last menstrual period. These were not symptomatic women in early menopause who could desperately benefit from the use of HT. The E+P arm of Women's Health Initiative showed very small absolute increases in risks. If 10,000 women were to take E+P (specifically Prempro), there would be eight extra breast cancer cases, seven heart attack,, eight CVAs, and 18 blood clots. There would also be six less cases of colon cancer and five less hip fractures. In the estrogen only arm, there was actually a nearly significant decrease in breast cancer cases. Thus, newer theories are now suggesting that the progestin component of HT may be “the bad guy.”

A reanalysis of the Nurses' Health Study and Women's Health Initiative in 2006 actually showed that younger women on HT within ten years after menopause actually had an 11-30 percent decrease risk of MI. When the women were greater than 10 years out, they had an increase risk of CVA, MI, and even Alzheimer's Disease (WHIMS study). Starting

HT early at the time of transition might actually have a positive effect on memory, concentration, and cognition. The use of HT can be life altering for many women. Small risks in appropriate candidates must be weighed against quality of life issues.

Which One Do I Choose?

Estrogen is available in oral forms, transdermal products such as patches, gels, lotions, sprays, and vaginally. Women with symptoms of only urogenital atrophy (vaginal dryness) should use vaginal estrogen only which comes in creams, pills, and rings. If a woman has a uterus, progesterone must accompany estrogen and is usually given orally. The recent "bioidentical hormone" rage needs to be approached with great caution. Bioidentical hormones (BHs) are biochemically similar to those produced by the body or ovaries and include estrone, estradiol, estriol, progesterone, testosterone, DHEA (dihydroepiandrosterone), and cortisol. The FDA has approved many hormone replacement products such as brand name Estraderm, Vivelle, Climara, and Alora. Estrace, Estradiol, Estrogel, (all estrogen) and Prometrium and Crinone (progesterone). Many of these are transdermal (absorbed through the skin) and bypass the "1st pass effect of the liver." Because of this, the risk of blood clots may be significantly less. Unfortunately, the term "bioidentical" is often used to refer to expensive (non-insurance covered), custom-compounded hormones made at special pharmacies. Dr. Wolf Utian of the North American Menopause Society has clearly

spoken out against the use of BHs. Despite claims by some physicians, pharmacists, and famous people such as Suzanne Somers, these hormones are not more natural or any safer than conventional hormones and are not FDA regulated or approved. They must be used cautiously because of variation in every single dose. Often women requesting BHs also request hormone level testing. Saliva testing can be inaccurate. Furthermore, HT can and should be tailored to the individual based on symptomatology not on lab values.

Bottom Line

Hormone therapy can be used safely and effectively for the control of menopausal vasomotor and vaginal symptoms. Perhaps transdermal estrogen is best for many women. I would love to see more data regarding the use of the Mirena IUD for uterine protection in the menopausal woman on estrogen. This practice is already becoming more widespread in Europe. Regarding hormone use in general, the FDA clearly states women should "use these products at as low a dosage and for the shortest amount of time necessary."

For women without risk factors who need hormones, go for it. Use them. Feel better. Get your yearly mammograms. Call your doctor if you have vaginal bleeding while on HT. Attempt to wean off hormones with your doctor about every 6-12 months. Stay tuned for the "KEEPS" trial and other studies that in the near future will help us all better understand this plethora of information. Don't let fear or uncertainty control your life. Embrace yourself. Embrace menopause.