

Your information source on menopause, mood and quality of life.

LETTER FROM THE EDITOR

The Challenge of Menopause

By Jeanne Alexander, MD

The menopausal transition can accelerate or intensify certain physical and emotional challenges.

In *Menopause and Memory* our interview with noted researcher Victor Henderson considers how hormonal shifts at this stage of life can affect memory and cognitive functioning. Are little lapses in memory — forgetting where you put your keys or the title of the book you read last week — cause for worry or just a natural part of aging? Why do some women say they can think better on estrogen? Does hormone replacement offer protection from that dreaded word, “dementia,” or pose an increased risk for women in older age groups? Dr. Henderson reports on current research in this important area.

Next, we consider women with varying degrees of anxiety whose symptoms are made worse by menopause and stress. Since I specialize in hormones and the brain, I often see patients who complain of anxiety once they begin the “change of life.” During my evaluation, it usually becomes clear that their anxiety had its beginnings long before this transition, but only became problematic when coupled with hot flashes, sleeplessness, and other menopausal complaints.

Women are two to three times more likely to suffer anxiety as men and often experience anxiety in tandem with depression. One of the difficulties in educating people about anxiety is that this condition seems “normal” to those who have it. Patients often feel their anxiety protects them against many imagined and real dangers. Worry seems like an old friend, and the suggestion that a woman reduce her vigilance is often met with dismay and disbelief. My challenge is to show individuals that their fears are both greater and more intrusive than they realize and that worry is not a magic wand that can banish negative events.

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"Taking joy in life is a woman's best cosmetic."

--Rosalind Russell

In the article, *Are Women Prone to Worry?* Dr. Vivien Burt and I walk the reader through the evolution of fear and anxiety and explain how to tell the difference between appropriate and excessive worry. We list the special situations in a woman's life that may cause or worsen anxiety, such as PMS, hormone treatments, perimenopause, hot flashes, and post-partum hormonal shifts, and we also consider the impact of anxiety on sleep.

Next, we explain how physicians determine whether anxiety is mild, moderate, or severe and how they decide upon a treatment. (Chronic anxiety that is moderate to severe often requires medication, while intermittent or mild anxiety can be dealt with through patient education and therapy.) Finally, we consider how a combination of cognitive therapy, stress reduction, and regular exercise can help women better manage their life challenges.

We are also pleased to launch a new department in this issue: Alternative Therapies. In our first feature, Dr. Tracy Gaudet considers the trend toward natural hormones and the encouraging research on black cohosh as a treatment for hot flashes.

In our Self Care section, we consider *How to Prevent Sun Damage ...and slow the aging process*, and give some tips for minimizing sun exposure year-round.

In this issue, Dr. Andrea Braverman also considers the emotional strain on younger women who have difficulty getting pregnant. In *The Stress of Infertility*, she tells how couples counseling can help.

— Jeanne L. Alexander, MD

INTERVIEW

Menopause and Memory

Does forgetfulness come with age?

With Victor Henderson, MD, MS

Doctors used to think that hardening of the arteries was responsible for declining memory. Then studies suggested that an estrogen shortfall might be one of the culprits. This seemed to explain why so many women forgot names or dates, misplaced their keys, and complained of fuzzy thinking starting at midlife. For a while clinicians relied on hormone therapy to alleviate these symptoms and prevent more serious problems later on.

Now, the Women's Health Initiative Memory Study (WHIMS) suggests that, far from having a beneficial effect on memory, hormone therapy might even speed the onset of dementia in post-menopausal women who begin taking hormones at a later stage.

Will the results be the same for younger women? Does the duration of treatment matter? The jury is still out on these and other important questions.

Investigators have also suggested that memory problems during menopause may not arise from structural changes in the brain, but from increasing stress. In addition, we need to know more about the links between memory loss, depression, and menopausal sleeplessness.

To explore the subject of menopause and memory, our managing editor, Valerie Andrews, talked with researcher Victor Henderson, director for Geriatrics and Extended Care at the Central Arkansas Veterans Healthcare System, professor of geriatrics and neurology at the University of Arkansas for Medical Sciences and an authority on age-associated memory loss, Alzheimer's disease, and related cognitive disorders.

Dr. Henderson currently directs the Rural Aging & Memory Study in Bradley County, Arkansas and is an investigator with the Melbourne Women's Midlife Health Project. He also serves on the External Advisory Board of the Women's Health Initiative Memory Study and is the author of Hormone Therapy and the Brain (NY: Parthenon Publishing, 2000.)

What do we know about the relationship between memory and aging?

Several large observational studies show that women who have used hormone therapy at some point after menopause

seem to have a lower risk of developing Alzheimer's disease. But more recently, the Women's Health Initiative Memory Study (WHIMS, www.wfubmc.edu/whims) found no appreciable advantage for estrogen-plus-progestin hormone therapy. In fact, in this trial women assigned to hormone therapy showed a higher rate of dementia when compared to placebo. The results for women taking estrogen alone are similar.

The WHIMS trial, like almost all research trials, was far from perfect, but it gave us new data on what happens during an important period of a woman's life. The message is that women between 65 and 79 years of age who initiate combination hormone therapy at this time of life have an increased risk of dementia.

In this study, Alzheimer's disease wasn't considered separately from other causes of dementia, and the numbers were too small to tell us for certain if WHIMS findings specifically indicate an increased rate of Alzheimer's disease, but in my view it very likely does.

One difficulty is that we don't know if WHIMS findings should be applied to women under the age of 65. The WHIMS study also doesn't tell us if estrogen would harm or benefit memory if hormone replacement is started at a younger age.

Most women who use hormone therapy start therapy around the time of menopause. Moreover, observational studies showing a protective effect of hormone therapy have generally involved women who initiated hormone therapy earlier than women in the WHIMS trial.

For the time being, though, I would not presume a memory benefit for younger women. We need to wait for more data to come in.

When will we know more about the relationship between hormone therapy and menopausal memory in general?

A new study, called the KEEPS study (Kronos Early Estrogen Prevention Study) will look at the effects of different forms of hormone therapy in younger post-menopausal women, but this trial is just now beginning, and investigators won't have results for a number of years.

During menopause, women often complain of "brain fog" or memory loss. How common is this?

Many women do report a decline in memory as they reach middle age. However, this issue has not yet been carefully studied. To date, researchers have been unable to prove by

A little stress helps people retain information better, but a lot of stress makes learning and memory worse. Some investigators believe that chronic, severe stress actually damages nerve cells in the brain.

formal memory testing that memory deterioration actually occurs at this time of life.

Last year, we reported on memory in over 300 middle-aged women in Melbourne, Australia (VW Henderson et al, *Neurology* 2003;60(8):1369-1371). Our memory test required women to learn a list of 10 words and then recall the words after a short delay. Memory scores were unrelated to menopausal status or to levels of estrogen measured in a blood sample.

Though it did not focus on memory, the multi-center Study of Women Across the Nation (SWAN, www.edc.gsph.pitt.edu/swan/public) found that mental skills did not decline after menopause when compared with pre-menopausal scores.

What about the relationship between memory and stress?

At midlife women may experience higher levels of stress as they deal with growing children, ailing parents, job responsibilities, and hormonal changes that affect sleep. Sleep deprivation certainly can impair memory and other mental abilities, as can stress.

The brain is an amazing organ. People have a surprising capacity to learn and retain new information. When we are confronted with a lot of new information all at once, we need to focus on what's important, screen out what's irrelevant, and organize important material in a way that it can be efficiently committed to memory.

But stress reduces our ability to juggle lots of tasks simultaneously. A little stress actually helps people retain information better, but a lot of stress makes learning and memory worse. Once stress levels become too high, things start to deteriorate. Some of the research findings on long-term stress are more controversial. Some investigators believe that chronic, severe stress actually damages nerve cells in the specific part of the brain involved in learning and memory.

What are the most common memory complaints for women in midlife?

Let me give you some examples. A woman might walk into a room and then forget the task she came in to accomplish. Or she might forget names of acquaintances, movie titles, and so on. In middle age and even more so in old age, people will say, “The name is on the tip of my tongue, but I just can’t come up with it.” Or, “I was talking on the phone to a friend about a book I had just finished reading, and, for the life of me, I couldn’t come up with the title. It came to me a few minutes after I hung up.”

There is some question whether these word-finding difficulties are related to memory problems, per se, to an information-processing impairment, or to some other cognitive problem.

Are word-finding difficulties anything to be concerned about?

I think it’s important to reassure women that difficulty coming up with names is generally not believed to be an early sign of Alzheimer’s or other forms of dementia. I would be concerned if a person were consistently forgetting appointments or prior conversations or had difficulty recalling what happened yesterday. These symptoms usually affect older individuals and are the kind that may warrant medical assessment.

Is there any research linking hormone levels to the kind of word-finding difficulties that begin around the menopausal transition?

Some studies in younger women suggest that articulation — which isn’t exactly the same thing as coming up with word names — is better during the high-estrogen part of the menstrual cycle as compared to menstruation, when estrogen levels are low. There is also evidence that estrogen might enhance learning and recall of information that is verbally encoded — information from a word list, for example, or details from a short story.

Dr. Barbara Sherwin at McGill University published a randomized, placebo-controlled study (one of the highest levels of evidence) of women undergoing surgical menopause — removal of the uterus and ovaries. She reported that for these women estrogen can preserve or enhance verbal memory. However, it had no apparent effect on memory that doesn’t require verbal encoding.

We have studies underway that will examine effects of estrogen on naming skills for women undergoing natural menopause.

I should also add here that researchers have looked at naming and memory in older post-menopausal women, and

there is no strong evidence that older women who initiate hormone therapy will show memory improvement.

What about anecdotal reports that estrogen replacement helps women “think better”?

Researchers have certainly heard women on estrogen patches or oral hormone therapy say they can think more clearly as a result of treatment. Still, we have yet to understand exactly what’s going on.

One possibility is the improvement some women perceive is related to mood. In the Melbourne Women’s Midlife Health Project we found a relation between low mood and poor memory, but I suspect there’s more to these women’s experiences than mood alone.

Can you tell us more about the impact of depression on the brain?

Depression is definitely linked to memory deficits. This association has been shown in any number of studies, and it is true for both women and men.

Menopause per se does not appear to cause depression, yet women with a prior history of depression are more likely to experience new depressive symptoms during the menopausal transition. Research conducted by Professor Lorraine Dennerstein in Melbourne, Australia, indicates that other factors can contribute to depressed mood during this time of life. These include daily hassles, poor physical health, a history of premenstrual problems, and negative attitude toward aging.

Might some women respond better than others to hormone therapy because they are more sensitive to its effect upon the hippocampus, that portion of the brain that governs not just memory, but emotion?

That’s a good question, but I’m not sure I or any one else can provide a good answer. Estrogen does exert a number of effects on the hippocampus that would be expected to benefit memory. Some women may well experience hormone therapy differently, and it is possible that estrogen’s effects on the brain could vary from person to person.

Do women have more difficulty with memory loss than men?

Middle-aged and elderly men also have trouble with recalling names or learning new information, and it is not at all clear that the magnitude of the problem is any different for women than for men. At this point we don’t even know for sure whether problems with recall occur in direct relation

To safeguard memory function, work on reducing stress levels. Refrain from taking on too many tasks. Don't volunteer for an extra project when your in-laws are visiting and your teenager needs help with homework. Take time for yourself.

to menopause and hormonal shifts or as a general aging effect.

Since hormone therapy requires further study, what else can women do to safeguard memory and cognitive function?

Work on reducing stress levels. Stress is especially common during midlife. Some hassles are unavoidable, but it is reasonable to refrain from taking on too many tasks at once. Try to stay clear of unduly stressful situations. Don't volunteer for an extra project at work during the week when your mother-in-law is visiting and your teenager needs extra help with algebra assignments. Take time for yourself. Set aside time for relaxation.

Vasomotor symptoms like hot flashes may disrupt sleep. If this is the case, make sure you get more sleep time to make up for this. Some women also develop sleep apnea — which is trouble breathing while asleep — after menopause, and in these cases, evaluation by a sleep specialist can be helpful.

Seek help if your energy level seems near zero, or you feel down in the dumps for a period of time. Good nutrition is important, though I believe too many people over-emphasize costly nutritional supplements at the expense of a balanced diet. Finally, physical exercise has multiple benefits, and there is some evidence that it can benefit cognition. *[We will explore the role of exercise in mood, memory and mental functioning in a forthcoming article —Ed.]*

For information on menopause and memory:

North American Menopause Society

www.menopause.org

For information on dementia and Alzheimer's disease:

Alzheimer's Association

www.alz.org ◆

MOOD & STRESS

Are Women Prone to Worry?

How to cope when anxiety gets out of control

By Jeanne L Alexander, MD and Vivien Burt, MD, PhD

Do you worry excessively about your loved ones, your personal safety, or your performance on the job? Do you have the tendency to catastrophize and believe that the worst is about to happen? Do you spend nights lying awake, trying to avert potential problems? If so, you're not alone.

Anxiety is often thought of as a woman's issue because women are more than two to three times more likely to develop it than are men.¹ Five percent of all women suffer from anxiety at some point in their lives.² Some complain of generalized anxiety, a low-grade discomfort that never goes away. Others suffer from intermittent anxiety that waxes and wanes with no apparent cause.

Anxiety also includes more specific problems, such as phobias, post-traumatic stress disorder, and panic attacks.

Are women more sensitive to danger?

Evolution has always favored species that are more sensitive to danger. The fight-or-flight response of rushing adrenaline and accelerated heartbeat is our basic survival mechanism. The problem arises when this response becomes habitual or automatic and is no longer appropriate to the situation.

Some people are more sensitive to these cues from the environment. Others are so oblivious to risk that they often find themselves in hazardous situations. Most of us fall somewhere in the middle between these two extremes. Yet this variability in response gives humans an evolutionary advantage. The sensitive person alerts others to danger and the more risk-tolerant one holds the group in check and keeps others from reacting too quickly.

Women tend to be on the more sensitive end of the spectrum. There are many theories based on anthropological observations, role-related behaviors, and hormone shifts to explain this.

When is anxiety abnormal?

Abnormal anxiety is an exaggerated response to danger. "The person with an anxiety disorder sees a threat and reacts to a threat when no real threat exists."³

People who suffer from anxiety are perpetually consumed by worries and catastrophic thoughts. They are unable to

tune out the natural worries of day-to-day life and continue to play them over and over again in their heads. This heightened anxiety impacts their body, their feelings, and behavior, as well as their thinking patterns. It is unclear whether this anxiety drives the misjudgments of danger, or the physiological arousal drives the anxious thoughts.

In either case, ongoing anxiety can be an incapacitating and uncomfortable problem. Its worst manifestation is the full-fledged panic attack.

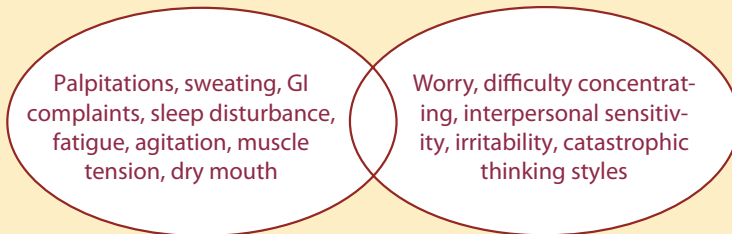
The mental symptoms of ongoing anxiety range from fear and worry to difficulty concentrating, oversensitivity to slights or personal exchanges, general irritability, and catastrophic thinking. Physiological symptoms include palpitations or increased heart rate, sweating, gastrointestinal distress, sleep disturbances, muscle tension, dry mouth, clammy hands, a feeling of being constantly on alert or keyed up, and a general sense of fatigue. (For the standard diagnostic criteria for general anxiety, see www.behavenet.com/capsules/disorders/gad.htm)

Anxiety and sleep

The anxious person may find it difficult to calm down and go to sleep. Some patients feel besieged by negative thoughts, and they say it's like having an internal committee so busy discussing the pro's and con's of every troublesome situation each night that they cannot rest.

Studies show that the sleep of an anxious person is not restorative and is generally too short. Such patients have more difficulty falling asleep

Physical and Mental Symptoms of Anxiety



The following criteria describe a Generalized Anxiety Disorder,⁴ a condition that is not related to a drug reaction or a specific medical condition:

1. Excessive anxiety and worry
 - About a number of events or activities
 - For a majority of time over the past six months
2. Difficulty controlling the worry
3. Significant distress or impairment in your ability to function in your daily tasks

(sleep latency), experience increased wake time throughout the night, and have reduced delta slow wave sleep, which is related to the body's ability to repair itself.

As a result, the anxious person is tired during the day, often has muscle aches and pains, has problems with thinking and memory, and feels generally irritable. These are all classic reactions to a reduction in quality sleep.

How does an anxiety disorder develop?

People with anxiety problems often have the first symptoms in childhood and adolescence. The symptoms may vary in severity depending on the situation and the amount of stress the individual faces, but at some point, the anxiety starts to interfere with day-to-day functioning. The patient may complain of performance anxiety, and problems with personal relationships and decision-making, or she may just feel a edge and ill-at-ease much of the time.

Anxiety often affects the entire family. A woman may defend her anxious behavior by saying, "Everyone in my family thinks like I do." She may have picked up behavior patterns and ways of reacting to stressful situations from a parental role model. A genetic susceptibility to anxiety may reinforce her feelings and responses and make her discomfort seem "familiar."

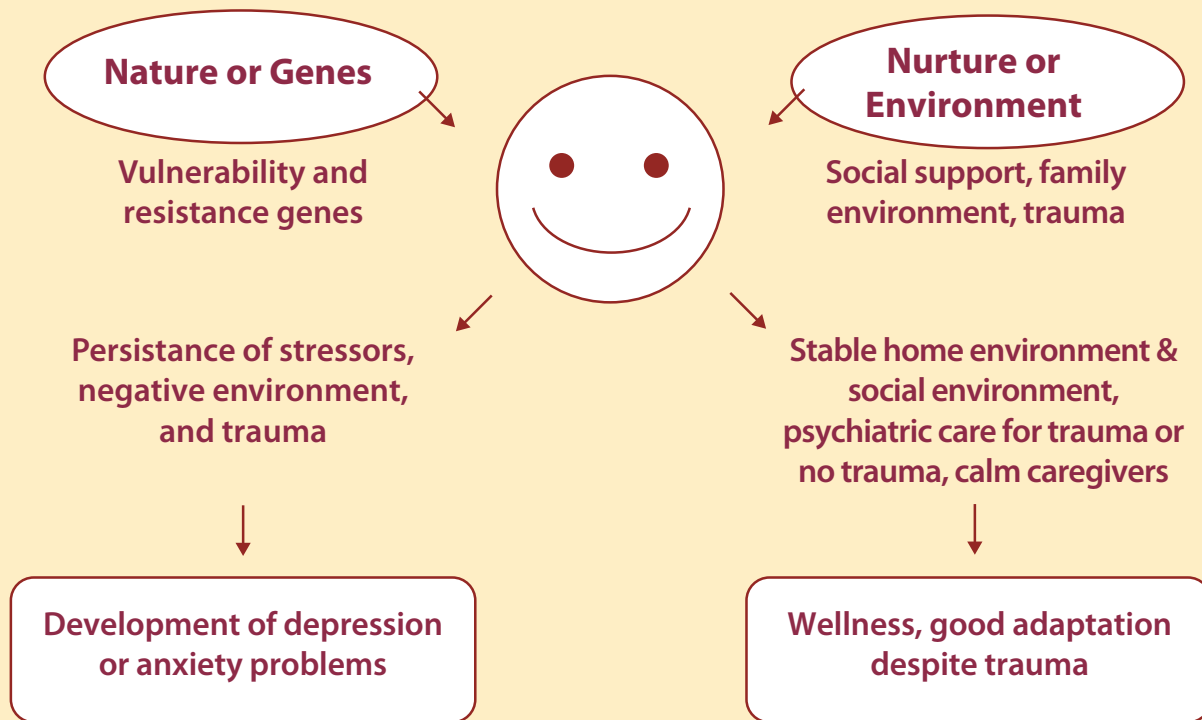
There is some evidence that mothers and daughters have similar anxiety complaints, but a good clinician will consider the whole picture: the home environment, the behavior pattern of caregivers, and genetic susceptibility.

Anxiety and the brain

We have much to learn about the neurobiology of generalized anxiety. However, some studies have found a link between inherited and acquired vulnerabilities and abnormalities in the benzodiazepine receptor in the brain. (This receptor responds to sedatives, such as Valium® and alcohol, producing a feeling of relaxation.) Valium® and other benzodiazepines provide temporary relief, but they do not address the causes of anxiety or bring about a cure.

Antidepressants have proven effective in reducing symptoms of anxiety, as well. Some

Nature versus Nurture



The nature-or-nurture concept plays a significant role in our emotional development. A woman may become more prone to anxiety if, for example, she is sensitive to her environment and experiences trauma early on in life. Triggers can range from the loss of a parent, the stress of illness, and experiencing or witnessing violence or abuse, to constant uprooting and war or civil unrest. Prompt and effective counseling can diminish the effects of these triggers.

The more severe the trauma, the more likely it is to induce anxiety, even in children who are less sensitive to their surroundings.

In terms of genetic inheritance, little is known. Two studies showed modest heritability, 19.5 percent and 30 percent of relatives of the identified patient,⁵ and one study of identical and fraternal twins was not able to show any correlation between siblings and anxiety responses.⁶

While many feel there is a genetic component to anxiety, environment and learned behavior patterns also play a major role. This is particularly true for women.

Adapted from: Plotsky PM, et al. Psychiatr Clin North Am. 1998;21:293-307

researchers have found that anxiety-related sleep disturbances are related to abnormal regulation of serotonin levels⁷ (serotonin is a neurotransmitter that modulates mood). This may be one of the ways that SSRI (selective serotonin reuptake inhibitors) antidepressants can help — by stabilizing sleep patterns.

Anxious people may try to alleviate their symptoms with alcohol. While alcohol can give a momentary lift, the individual will feel worse, and mood will plummet as it leaves the system.

Anxiety and quality of life

Anxiety has a global effect on a person's life. Psychiatric researcher Ronald Kessler⁸ found that anxious individuals rated their mental health as "fair" or "poor" six times more often than healthy individuals. Thirty-five percent of those with severe anxiety problems considered themselves moderately to highly socially impaired. Anxiety can also affect job performance: 11 percent of those with an anxiety problem in this study reported missing six or more days of work in a given month.

Recommended Resources

For more information on Cognitive Behavioral Therapy, consult this three-part series written by our managing editor, Valerie Andrews, for WebMD Health.

Part I

"Do Your Thoughts Drag You Down?"

Cognitive therapists say yes. Are they on to something?

www.my.webmd.com/content/article/11/1674_50428.htm

Part II

"The Art of Self-Examination" Cognitive Therapy Can Change Your Negative Thinking

www.my.webmd.com/content/article/11/1674_50565.htm

Part III

"Fixing Common Thinking Errors" Turn your distorted thinking around with these tips.

www.my.webmd.com/content/article/11/1674_50566.htm

For a cognitive behavioral therapist in your area, consult the Association for Advancement of Behavior Therapy, at www.aabt.org.

For general information on anxiety disorders, contact The Anxiety Disorders Association of America, www.aada.org.

Local and National Support Organizations

Anxiety Disorders Association of America
6000 Executive Blvd., Suite 513
Rockville, MD 20852
301-231-9350

(continued on the following page)

Discomfort can also be heightened by premenstrual symptoms, childbirth, the perimenopausal transition, hot flashes, and certain hormone treatments. We explore these factors below.

PMS and anxiety

Premenstrual irritability and mood changes can increase anxiety. These need not be significant enough to be considered a premenstrual dysphoric disorder (PMDD), a serious form of cyclical depression that occurs one week prior to menstruation.

While some patients may have a sub-clinical (mildly symptomatic) form of premenstrual dysphoric disorder, others simply experience a magnification of their anxiety symptoms the week prior to menstruation. These women often blame their problems on PMS when, in fact, the menses is simply intensifying a problem they have during the entire month.

Perimenopause

Women who have had intermittent but tolerable anxiety may also have increased emotional difficulties when they approach the "change of life." Ellen Freeman writes in a 2004 paper that perimenopausal women with a history of depression are twice as likely to have depressive symptoms at this time of life.⁹ Perimenopausal women with hot flashes and night sweats are also four times more likely to suffer from depression compared to those without vasomotor symptoms; thus, hot flashes in and of themselves present a risk for mood problems.¹⁰

A combination of ongoing low-level anxiety, hot flashes, and related sleep disturbances may also increase emotional discomfort.¹¹ Women often complain that menopause causes their anxiety, yet a careful inspection of their history reveals that they have long suffered low-level anxiety that has blossomed under the biological stress of "the change."¹²

The SWAN study (a large multi-site study designed to examine the health of women during their middle years) found that psychological symptoms are likely to be associated with estrogen and progesterone hormonal fluctuations in the early stages of menopause. Not all women with low-grade anxiety experience this sudden flowering of symptoms, however.

Hot flashes

It is important to distinguish between a hot flash and an anxiety attack. Hot flashes occur during the day as well as at night. They are associated with increased core body temperature, a feeling of heat rising from the chest to the face, and profuse sweating.^{12,13} This shift in core body temperature occurs with hormonal shifts and is related to a change in neurotransmitters in the part of the brain called the hypothalamus.¹⁴

An anxiety attack is not associated with a change in body temperature, even though it produces sweaty and clammy hands and feet, accompanied by an increased heart rate. This anxiety response is triggered by neurotransmitters in the part of the brain known as the locus coeruleus.

Hot flashes are linked to variable and declining estrogen levels that occur during the change of life.¹⁵ Not all women suffer from hot flashes. The percentage of women with hot flashes varies depending on culture, ethnicity, and diet.

In the U.S. approximately 20 percent of menopausal women complain of significant hot flashes.¹⁶ During the perimenopause, the ovaries "sputter," monthly egg production decreases, and it finally shuts down altogether.

At this time, a woman may produce different levels of estrogen and progesterone from month to month. The constant change in hormones levels causes thermoregulation problems in some women, affecting the hypothalamus.

Hot flashes are also related to a woman's ability to manage stress and whether she

National Institute of Mental Health (NIMH)
Information Resources & Inquiry Branch
Room 15C-05
5600 Fishers Lane
Rockville, MD 20892
1-800-64-PANIC or (301) 443-4513

National Mental Health Association
1021 Prince Street
Alexandria, VA 22314-2971
1-800-969-6642

Self-Help Books

Bourne, E. J. (1995). *Anxiety and Phobia Workbook*. Oakland, CA: New Harbinger Press.

Copeland, ME. (1998). *The Worry Control Workbook*. New Harbinger Publications, Inc.

Craske, MG (1994). *Mastery of Your Anxiety and Panic II*. Graywind Publications.

Foa, E. B., & Wilson, R. (1991). *Stop Obsessing! How to overcome your obsessions and compulsions*. New York, NY: Bantam.

Hanh, T. N. (1976). *The Miracle of Mindfulness*. Boston: Beacon Press.

Markway, B. G., Carmin, C. N., Pollard, C. A., & Flynn, T. (1992). *Dying of embarrassment: Help for Social Anxiety and Phobia*. Oakland, CA: New Harbinger Press.

Robins Eschelmann, E, McKay M (1995). *The Relaxation & Stress Reduction Workbook*. New Harbinger Publications, Inc.

Zuercher-White, Ph.D. (1995) *The End of Panic: Breakthrough Techniques for Overcoming Panic Disorder*. New Harbinger Publications, Inc.

has a history of anxiety or depression. It is important to note that depression and anxiety, as well as stress, can intensify hot flashes.¹⁷ Hot flashes can also disturb one's sleep and make depression and anxiety worse.¹⁸

Progesterone

A small number of women have difficulty taking synthetic progesterones, and as a result, they become depressed.¹⁹ (Progesterone affects a number of mechanisms in the brain that control serotonin levels.) Midlife women on estrogen replacement are likely to be on a different form of progesterone.

Others experience a “Valium®-like effect” when they take natural progesterones.²⁰ In fact, some feel as though they have just taken a sleeping pill.²¹ This appears to be a result of the conversion of natural progesterone to “allopregnenolone,” the brain's own natural sedative. Allopregnenolone works on the benzodiazepine receptors responsible for calming or exciting the brain. (Valium®, Xanax®, Ativan®, and Klonopin® are all benzodiazepines.)

Women who feel irritable on progesterone or find that it makes them anxious and depressed generally have difficulty tolerating hormone replacement or birth control pills that contain this substance.

A clinician will usually offer a natural progesterone as an alternative to a synthetic progesterone, such as Provera®. If the patient is still reactive, there are other options.

Progesterone-sensitive women may be able to tolerate a Mirena® IUD (a progesterone IUD), or a low-dose vaginal progesterone gel (4 percent). These choices have the advantage of limiting the brain's exposure to progesterone but require careful monitoring.

These solutions are suitable for those on hormone replacement therapy. The woman who is irritable or anxious on the birth control pill is often advised to

try another form of birth control. (*We will discuss the progesterone-sensitive woman in a future article — Ed.*)

Post-partum anxiety

Post-partum anxiety (anxiety that persists for several weeks after delivering a baby) appears to be more common than depression.²² Amy Wenzel reports that 30 percent of these women suffer from worry and generalized anxiety while only 12 percent were depressed. Other studies show anxiety in 18 percent to 20 percent²³ of the post-partum population.

The vulnerable woman who has had pre-existing problems with anxiety is more at risk for recurrence or worsening of her symptoms following childbirth. If a woman feels that the demands on her have mushroomed out of control, she is more likely to be anxious. The post-partum period is a challenging time when women sleep less, have to adjust to the needs of the child, must restructure the family environment, and cope with any financial stress associated with the baby's arrival.

The treatment of post-partum anxiety is important for the quality of life of the mother,²⁵ for the family, and the growing child.

Sometimes post-partum anxiety is confused with a post-partum thyroid condition. For this reason, a clinician should always check the thyroid when determining the nature of mood and or anxiety problems post-partum.

Treatments for anxiety

If you think you may have an anxiety problem, there are many successful treatments that will help you take control of the problem. Experts agree that mild-to-moderate mood and anxiety problems should be treated first with talk therapy.

Cognitive behavioral therapy (CBT), a short-term approach focusing on the management of negative thoughts, has proven especially effective. Here, you learn to identify and counter your fears and nega-

tive beliefs. Studies show that this approach is very helpful in decreasing long-held behavior patterns associated with anxiety.

If your anxiety is severe and does not respond to psychotherapy, medication may help your system stabilize. The most commonly prescribed medications are the serotonergic antidepressants (Prozac®, Zoloft®, Paxil®, Luvox®, Celexa®, and Lexapro®) and newer antidepressants that act on both the serotonergic and noradrenergic pathways (Effexor®). Your clinician will choose the one best suited to your individual needs.

Ideally, women of childbearing age should choose a psychiatrist who is familiar with the effects of medications on pregnancy and lactation. The American Academy of Pediatrics recommends Paxil® and Zoloft® for nursing mothers.

A reliable and well-respected patient resource on the interaction of drugs and lactation can be found at www.Motherisk.org — a counseling and research program associated with the University of Toronto. ♦

Footnotes for **Are Women Prone to Worry?**:

- 1 Eaton et al. 1994; Robins et al. 1984; Yonkers et al. 1998.
- 2 Wittchen et al. 1994.
- 3 Freeman and diTommaso 2002
- 4 American Psychiatric Association 2000.
- 5 Noyes et al. 1987; Kendler et al. 1992.
- 6 Torgersen 1983.
- 7 Hollander and Simeon 2005
- 8 Kessler et al. 1999.
- 9 Freeman et al. 2004.
- 10 Joffe et al. 2002.
- 11 Baker et al. 1997; Bromberger et al. 2001; Avis et al. 2001.
- 12 Feldman et al. 1985.
- 13 Freedman and Krell 1999.
- 14 Guthrie et al. 1996.
- 15 Dennerstein et al. 2000; Rannevik et al. 1995.
- 16 Dennerstein et al. 2000.
- 17 Freeman et al. 2001.
- 18 Baker et al. 1997.
- 19 Speroff et al. 2000.
- 20 Bjorn et al. 2000; Panay and Studd 1997; Smith et al. 1994.
- 21 Arafat et al. 1988.
- 22 Wenzel et al. 2003.
- 23 Wenzel et al. 2001.
- 24 Mineka and Kelly, 1989.
- 25 Schweizer 1995.

General references for this article can be accessed in the online version of this newsletter at www.afwh.org. We have provided direct links to Pub-Med citations for your convenience.

SEXUALITY

The Stress of Infertility

The benefits of support groups

By Andrea Braverman, PhD

“Just relax and you’ll get pregnant!”

This advice is given liberally to most infertile couples by friends, family, acquaintances — and unfortunately even healthcare workers.

Although the words are well-meant, their effect is far from positive. Implicit in this well-intentioned advice is both blame and pressure. Blame, because the couple is obviously not relaxed, and it is assumed that this is the reason for their infertility. Pressure, because if they do as they’re told, the couple should be able to conceive.

Most experts agree that although there is an association between stress and infertility, there is no evidence that stress causes infertility.^{1, 2} But the reverse is true. Infertility in a couple who want to conceive can create high levels of stress.

Persistent stress can, in turn, trigger depression. One study shows that the levels of anxiety and depression experienced by some infertile women are comparable to those of women with cancer or hypertension or to women patients undergoing cardiac rehabilitation.³ Further, the stress of infertility is rated second only to the stress of divorce or death of a family member.⁴

For these reasons, infertile couples need access to counseling and mental health services.

The depression associated with infertility can either be transient — brought on by failed treatment, for example — or chronic — a result of repeated failures and the attendant strain on the couple’s marriage, work, and social life. Differentiating between these types of depression is crucial in helping a couple deal with infertility and its emotional consequences.

Counseling can be helpful, too, as a couple begin to explore their options, from in vitro fertilization and donor sperm or eggs to adoption and surrogacy. Couples may feel differently about these alternatives, and their disagreement can be the source of added stress.

The benefits of support groups

Looming large on the long list of infertility stressors is a feeling of isolation. Infertile couples may be a minority

— roughly 10 percent of the population — but they are still a substantial group. According to the American Society for Reproductive Medicine (ASRM), infertility, defined as the inability to conceive after one year of unprotected intercourse, affects about 6.1 million people in the U.S. (www.asrm.org/Patients/faqs.html).

Support groups such as the American Infertility Association (AIA) (www.americaninfertility.org/) and RESOLVE (www.resolve.org/main/national/index.jsp?name=home)

can reduce this sense of isolation by putting infertile couples in touch with one another and creating a venue to discuss similar problems.

Another hurdle for infertile couples is loss of control. This is especially hard to accept in American culture. We are shaped by the notion that if we try hard enough, we will succeed — but when it comes to infertility, there are no extra credits or ways to get ahead.

In this context, comments about relaxing can do more harm than good because they feed the couple's false belief that they have some control of the situation.

Many patients want desperately to believe that they have some control over whether they get pregnant — because it is hard to feel powerless. These women will look to alternative medicine treatments that have not yet been substantially studied and proven in an effort to take control of this difficult situation.

Why women are more stressed

Regardless of the cause of the infertility (male or female physiology, or both), research suggests that the woman shoulders the heavier emotional burden.^{4,5,6}

Men and women cope with the stress of infertility very differently,⁷ and these differences can be the source of intense marital strain. Although women tend to be more open to psychological counseling than men, the importance of this

Red Flags in "The Fertility Game"

The American Society for Reproductive Medicine lists these signs that an individual dealing with infertility could benefit from counseling:

- Loss of interest in usual activities
- Depression that doesn't lift
- Strained interpersonal relationships
- Difficulty thinking of anything other than infertility
- High levels of anxiety
- Diminished ability to accomplish tasks
- Difficulty concentrating
- Change in sleep patterns
- Change in appetite or weight
- Increased use of drugs or alcohol
- Thoughts about death or suicide
- Social isolation
- Persistent feelings of pessimism, guilt, or worthlessness
- Persistent feelings of bitterness or anger

intervention remains largely unrecognized by patients and possibly by physicians, as well.⁸

Individuals or couples can find qualified infertility counselors in their region by checking the web sites of AIA, ASRM, or RESOLVE.

Couples counseling can help men and women bridge the gap that is often created by gender-specific coping styles and polarized attitudes; however, research suggests it is more effective in alleviating personal depression.⁹

One word of caution: Psychological intervention is invaluable in the treatment of infertility, but it should not be promoted as a means of improving pregnancy rates.

While some research suggests that high stress levels during infertility treatment are associated with lower pregnancy rates,¹⁰ other research indicates that psychosocial intervention does not improve the outcome.⁹

The bottom line is this: Psychological counseling can help couples function normally through the stress of diagnosis and infertility treatments and have a positive impact on their lives — regardless of the outcome.

For more information, see *The Psychology of Infertility* [www.medicalpost.com/mpcontent/article.jsp?content=/content/EXTRACT/RAWA > RT/3838/19B.html](http://www.medicalpost.com/mpcontent/article.jsp?content=/content/EXTRACT/RAWA%20RT/3838/19B.html) ♦

Footnotes for *The Stress of Infertility*:

- | | |
|-----------------------------|-----------------------|
| 1 Sheiner E 2003. | 6 Berg BJ et al 1991. |
| 2 Hjollund NH 2004. | 7 Jordan C 1999. |
| 3 Domar AD 1993. | 8 Schmidt L 2003. |
| 4 Baram D et al 1988. | 9 Boivin J 2003. |
| 5 Koropatnick S et al 1993. | 10 Boivin J 1995. |

General references for this article can be accessed in the online version of this newsletter at www.afwh.org. We have provided direct links to Pub-Med citations for your convenience.

How to Prevent Sun Damage

... and slow the aging process

By Jeanne L Alexander, MD

Why do some women have smooth, unwrinkled skin at 50, while others spend a fortune on treatments for puffy eyes, laugh lines, freckles, crows feet, and the little lines above the mouth that make your lipstick bleed?

“You have the face nature gave you at age 20,” said Coco Chanel, “but you have to merit the one you have at 50.” And for the most part, she was right.

Natural aging of the skin is largely predetermined by genetics. Men and women both notice the first signs of this when they reach their 30s. But lifestyle choices — from smoking and sun exposure to living in a very dry climate — can accelerate the process.

To find out how the skin on your face, hands, neck and forearms would look without these damaging factors, compare it to the skin on your inner thighs or buttocks. You will find that sun-exposed skin is rougher, dryer, and has more wrinkling than the skin that has simply aged with time.¹

How to minimize that damage? First, reduce your hours on the chaise, and avoid the midday rays. While sunbathing is pleasurable, the bad news is that it keeps your skin in a “state of chronic inflammation.”²

The consequences of sun exposure are:

- Roughness
- Leathery Texture
- Scaling
- Decreased elasticity
- Decreased skin thickness
- Fine and course wrinkling
- Mottled pigmentation
- Open and closed comedones (blackheads)
- Accelerated aging
- Various forms of skin cancer, from benign to life threatening

Know your skin type

Your skin type, eye and hair color, and ethnicity determine how your skin stands up to the sun.

For example, women with blue eyes and fair complexions, freckles, or moles are less able to tolerate the sun and are more likely to develop skin cancers.

Dermatologists note that certain skin types are more at risk for skin damage from sun exposure. The following categories are based on pigmentation and ease of tanning.² Type I is the most sensitive and type VI, the hardest.

- | | |
|-----|---|
| I | Burns easily and severely, never tans |
| II | Burns easily, tans minimally with difficulty |
| III | Burns moderately, tans moderately and uniformly |
| IV | Burns minimally, tans easily and moderately |
| V | Rarely burns, tans darkly and profusely |
| VI | Never burns, tans a deep brown or black |

The more sensitive your skin, the more important it is to reduce your hours in the sun.

The biggest threat is not the weekend at the beach or the island holiday, however, but routine sun exposure: walking to the store, going for a coffee after lunch, or sitting at the bus stop. The sunnier and the dryer your climate, the more of a beating your skin will take. Researchers note that regular everyday incidental exposure is responsible for 80 percent of the damage you will incur from the sun over the course of your life.³

Prevention tips

The first rule is to avoid sunburn. Remember you can still get burned on cloudy days — and in less-than-sunny places like Great Britain. One study showed that 38 percent of English children under 20 had been sunburned in the previous year.⁴ So don't assume you are protected just because the sun feels “weak.”

To prevent further sun-associated skin aging:

- Wear a daily moisturizer with a built-in sunscreen.
- Apply sunscreen 30 minutes prior to lengthy sun exposure.
- Apply sunscreen to ears, toes, and the backs of hands and neck.
- Reapply sunscreen after swimming.
- Wear sun-protective clothing, including hats, and use umbrellas.
- Be especially careful around snow and sand; they both intensify the sun's effects.
- Stay in the shade as much as possible.
- Start skin protection young and train your children to watch their sun exposure and follow these simple rules.

Avoid tanning beds

Ultraviolet (UV) and infrared (IR) irradiation from the sun are the primary causes of damage to the skin.⁵ The lights

used on tanning beds are predominantly ultraviolet and can accelerate the aging process.

Sunlight of any kind harms the skin by:

- Directly altering DNA in skin cells,
- Decreasing immune function of your skin cells,
- Increasing occurrence of abnormal cells,
- Decreasing the elasticity of the skin.

Don't smoke

Smoking ages the skin just as quickly as repeated sun exposure. It decreases capillary blood flow⁶ to the skin and can triple your wrinkles.⁷ Women smokers are more at risk for this than their male counterparts. And the longer you smoke, the worse the wrinkling.⁸

The role of hormone therapy

The menopausal transition also affects the skin. As the ovaries shut down, and estrogen levels wane, the skin loses its thickness along with the collagen cells that give it its youthful firmness. Women who opt for hormone replacement have fewer wrinkles, and their skin also tends to retain its plumpness.⁹

The importance of a yearly checkup

It's a good idea to have a "whole-body skin check" by a qualified dermatologist once a year, especially if you are genetically predisposed to skin cancer or are in a high-risk category due to fair skin and a greater tendency to burn.

Various forms of skin cancer — even life-threatening melanomas — can be removed if the dermatologist finds them early.

In a future article we will consider *The Art of Skin Repair* and review the benefits of chemical peeling, dermabrasion, lasers, and skin creams containing retin-A. ♦

Footnotes for How to Prevent Sun Damage:

- | | |
|----------------------------|----------------------------------|
| 1 Bernstein EF et al 1996. | 6 Castelo-Branco C, et al. 1998. |
| 2 Fitzpatrick TB. 1988. | 7 Castelo-Branco et. al. |
| 3 Frenske NA. 1998. | 8 Ernster VL et al. 1995. |
| 4 Jarrett P et al. 1993 | 9 Castelo-Branco et al. |
| 5 Kligman AM. 1969. | |

General references for this article can be accessed in the online version of this newsletter at www.afwh.org. We have provided direct links to Pub-Med citations for your convenience.

ALTERNATIVE THERAPIES

Natural Hormones for Menopause

The latest data on black cohosh

By Tracy Gaudet, MD

In 2003, the Women's Health Initiative (WHI at www.whi.org) showed an increased risk of breast cancer and heart attack for women on one combination of estrogen and progesterone. This report sent many midlife women on a quest for alternative ways to deal with menopausal symptoms.

Now, if you ask any group of 50 year old women what they do to combat hot flashes, mood swings and menopausal sleeplessness, you're likely get a wide variety of answers: bioidentical or "natural" hormones, acupuncture, and over-the-counter herbal preparations like black cohosh.

But do these therapies work? Where does a woman go to find scientific evidence for her treatment choice? Do these approaches pose any dangers?

Studies show that American women often turn to alternative medicine, herbs and supplements to combat the menopausal symptoms, without seeking medical advice or informing their doctors of these treatments.¹ More than ever women need guidance in evaluating these options. They also need a more integrated approach to their health care.

Surveys reveal that approximately 80 percent of menopausal women are using "non-prescriptive therapies." Researchers in Washington state found similar results: 76 percent of women were using alternative approaches, with the majority using more than one modality:²

Stress-reduction techniques	43 %
Over the counter alternative remedies	37 %
Chiropractic	32 %
Massage therapy	30 %
Dietary soy	23 %
Acupuncture	10 %

Studies show that American women often turn to alternative medicine, herbs and supplements, without seeking medical advice or informing their doctors. More than ever women need guidance in evaluating these options.

Naturopathic or homeopathic care 9 %
Herbalists 5 %

Between 89 and 100 percent of these subjects found these approaches to be somewhat to very helpful. But what do the latest studies reveal?

This article is the first in a series that reviews the current medical literature, exploring the alternative approaches to menopause, fertility and PMS, and female cancers.

A recent study shows that women who are using compounding pharmacies believe that natural hormones are safer, cause fewer side effects, and are equally or more effective for symptom relief than conventional hormones.³

This is often an emotional response, based on the assumption that “natural is better.” Yet research shows these preparations differ in their effectiveness, may pose risks for certain patient populations, and often little or nothing is known about their long-term use.

In this article, we begin with one of the most-studied natural remedies: black cohosh.

Black Cohosh (*cimicifuga racemosa*)

The data on black cohosh is encouraging. A remedy for both PMS and menopause, this herb has been used by the Native American population for centuries, and in Germany since 1950. Its most studied form is a brand called Remifemin®.

Black cohosh compares favorably to estrogen in regard to symptom relief. Initially, it was felt that black cohosh was estrogenic. But studies now show that it does not contain phytoestrogens nor does it have an estrogenic effect on vaginal cells. Additionally, there are no changes in hormone levels in women taking black cohosh.

In laboratory studies, black cohosh actually suppresses rather than stimulates breast cells.⁴

A randomized controlled trial in 1987 compared 80 women on 0.625 mg of Premarin with those taking 8 mg of black cohosh and placebo for 12 weeks. The group taking black cohosh showed significant improvement in menopausal symptoms, anxiety, and vaginal epithelium, and the herb was well tolerated.⁵ That same year, another study com-

If you ask any group of 50 year old women what they do to combat hot flashes, mood swings and menopausal sleeplessness, you're likely to get a wide variety of answers: bio-identical or "natural" hormones, acupuncture, and over-the-counter herbal preparations like black cohosh.

pared estrogen injections to black cohosh. This time, 82 percent of women taking black cohosh reported good-to-very-good relief of their symptoms, with no side effects.⁶

In 1988, researchers compared conjugated estrogens, estrogen-progestagen sequential therapy, estriol, and black cohosh. The results with black cohosh were comparable to the hormonal therapies.⁷

In a study of 629 women who underwent six to eight weeks of treatment with black cohosh, 80 percent of women had improvements in hot flashes, fatigue, irritability, and vaginal dryness. At eight weeks, 50 percent of women were symptom free.⁸

In a recent double blind, placebo-controlled trial, black cohosh (40 mg) was compared to conjugated estrogen (0.6mg) and placebo. Sixty-two women were enrolled and followed for three months. Black cohosh was found to be as effective as conjugated estrogen (CE) and superior to placebo in decreasing climacteric symptoms. Both black cohosh and CE had beneficial effects on bone metabolism. Black cohosh had no effect on the inner lining of the uterus (endometrial thickening) as measured by vaginal ultrasound, unlike CE, which had a significant increase in endometrial thickening. Additionally, both black cohosh and CE increased the vaginal epithelial cells. The authors propose that black cohosh may act as a selective estrogen reuptake modulator (SERM), meaning that it acts like estrogen on some tissues, but blocks the effect of estrogen on others.⁹ In summary, while many of the above studies have design weaknesses and more research is clearly needed, black cohosh appears to be safe and efficacious for the treatment of menopausal symptoms.

Clinicians should begin recommending doses of 20-40 mg orally, twice a day, standardized to 2.5 triterpenes.

Patients should be informed that it might be four to eight weeks before they notice an improvement. Side-effects are rare and include GI upset, headache, weight gain, and dizziness. *The Physicians' Desk Reference for Nonprescription*

Footnotes for Natural Hormones for Menopause

- | | |
|-------------------|-----------------------------|
| 1 Eisenberg, 1998 | 6 Petho, 1987 |
| 2 Newton, 2002 | 7 Lehmann-Willenbrock, 1988 |
| 3 Adams, 2001 | 8 Stolze, 1982 |
| 4 Amato, 2002 | 9 Wuttke, 2003 |
| 5 Stoll, 1987 | 10 Jacobson, 2001 |

General references for this article can be accessed in the online version of this newsletter at www.afwh.org. We have provided direct links to Pub-Med citations for your convenience.

Drugs and Dietary Supplements recommends using for no longer than six months. This time-frame was cited due to the fact that the longest study in the literature lasted six months. There is no indication that longer use is unsafe. Studies with use for two years are currently underway.

COMING SOON

How to Manage Midlife Mood Swings

Testosterone: Boosting your libido

Sleep Disorders and Depression

Alternative Therapies: A review of risks and benefits

Getting Enough Rest: Does your mattress make a difference?

Preventing Osteoporosis

A Guide to Infertility Treatments

Counting Cholesterol

How to Keep a Healthy Heart

About Men: What you need to know about *his* hormonal changes

Treatments for Erectile Dysfunction: How do they compare?

Black cohosh and breast cancer

Multiple studies show that in vitro black cohosh has an inhibitory effect on estrogen-sensitive breast cancer cells.

In the one placebo-controlled study to date that looked at the effectiveness of black cohosh in reducing menopausal symptoms for breast cancer patients, both the placebo group and the group receiving black cohosh had a 27 percent reduction in number and intensity of hot flashes. A placebo effect is common in this patient group. However, women on black cohosh reported a more significant reduction in sweating.¹⁰

More studies are needed in this population. It is useful to know that black cohosh is not estrogenic, and does not need to be avoided from a safety perspective. However, its efficacy in this patient group has not yet been established. ♦

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