# What Every Woman Should Know About Menopause - Part 2
## Symptoms and Treatment

by Susan Wasaha, RN, BEd, and Frances M. Angelopoulos, RN - AJN/Jan 96/vol.96.No.1

This week we will discuss some adverse menopausal symptoms that approximately 75% of women experience.

The intensity and frequency of uncomfortable symptoms vary by episode and individuals.

**Hot Flushes**

A hot flush or flash (vasomotor instability) is a feeling of warmth that starts in the neck or chest and radiates up to the arms, shoulders and face. It's frequently associated with headaches, palpitations, diaphoresis, and dizziness. Hot flushes often occur at night, causing sleep disturbances. In fact, sleepwear and bed clothes may become so dampened with sweat that they need to be changed during the night, further interfering with sleep. Hot flushes may last from a few seconds to several minutes and may occur repeatedly in the course of an hour or a day. They also tend to be more frequent and intense during times of stress. And though their intensity usually decreases over time, they may continue to recur for up to five years after menopause.

**Vaginal and Libido Changes**

Declining estrogen levels cause atrophic changes in the vagina, including diminished secretions and loss of elasticity. The urethra is similarly affected. These changes can bring about dyspareunia, increased risk of infection, urinary incontinence, and ultimately decreased libido. Though lessened sexual desire and pleasure may be related to these physical changes, age-related psychosocial concerns, such as the empty nest syndrome, or a partner's loss of sexual capacity may accentuate these problems. There's some evidence to support a direct connection between estrogen and libido, but studies also suggest that other hormones, such as testosterone, play a significant role. More research is needed to determine if estrogen actually increases sexual desire and satisfaction directly or indirectly through its effect on such factors as vaginal lubrication and quality of sleep.

**Osteoporosis**

Attributed to estrogen deficiency, osteoporosis is associated with significant increases in fracture rates, morbidity, and mortality. Maximum bone mass is reached by age 30 to 35. The trabecular bones of the spine and distal wrist respond most negatively to hormonal changes, putting them at greatest risk for early fracture.

Several factors may predispose a woman to developing osteoporosis. These include a family history of the condition; having a short, thin stature; being of European or Asian descent; and experiencing early menopause. A history of smoking, high consumption of alcoholic beverages and caffeine, a low-calcium diet, a sedentary lifestyle, and drugs such as steroids, levothyrozine (Synthroid), diruretics, and phenytoin (Dilantic) may also contribute to the risk.

**Cardiovascular Disease (CVD)**

Though women's risk for developing CVD prior to menopause is much lower than men's, by age 70 incidence levels in women and men are the same. Post-menopausal estrogen deficiency results in lipid changes, which cause an increase in low-density lipoproteins (LDL's), a decrease in high-density lipoproteins (HDL's), and a gradual increase in total serum cholesterol. All of these raise a woman's chances of developing atheroschlerosis, myocardial infarction, emboli, thromboses, and stroke. Other factors, such as genetic predisposition and lifestyle, also play an important role in determining who will develop CVD in later life.

**Skin Changes**

Perimenopausal women begin to experience increased skin bruising, wrinkling, thinning, and drying. These are thought to be due to estrogen-related changes in dermal connective tissue, especially collagen.

**Mood Alterations and Other Psychological Changes**

These include depression, anxiety, and introversion, which have been reported to increase as women approach menopause. Though some of these changes may be due to the psychosocial effects of the changing role and lifestyle that accompany the aging process for women, there's also reason to believe that they're a direct result of sleep disturbances caused by hot flushes (or by the aches and pains associated with osteoporosis, in those affected). Mood disorders in perimenopausal women may also be caused by the decrease in circulating estrogen, which directly affects neurotransmitters that regulate mood, appetite, sleep, and pain perception.

**Treatments**

Estrogen or home replacement therapy (ERT/HRT) has been widely documented to decrease the intensity of hot flushes and relieve vaginal dryness and lower urinary tract problems. The therapy is also reported to decrease the potential for osteoporosis, CVD, stroke-related death, and psychological distress. The extent to which exogenous estrogen reverses adverse skin changes in the long term is unclear at present; further research in this area is needed.

While these are significant benefits, numerous questions have been raised in recent years regarding the efficacy of long-term estrogen therapy in light of its adverse effects and health risks. Therapy with unopposed exogenous estrogen - estrogen that's given alone, rather than in combination with any other hormone - is associated with a higher-than-normal incidence of endometrial cancer (up to five to ten times the risk for those not taking estrogen). Adverse reactions such as weight gain, fluid retention, nausea, headache, breast discomfort, leg cramps, hypervascularity, hyper-or hypotension, gallbladder disease and gallstone formation, lethargy, and a general feeling of malaise have also been reported. In addition, high doses of estrogen may cause worsened glucose tolerance in women with diabetes, and long-term high doses may be associated with increased breast cancer risk.

When progestin added to the estrogen regimen to reduce the risk of endometrial cancer, unacceptable premenstral symptoms and withdrawal bleeding may occur. The therapy may also modify the benefits of estrogen to cardiovascular health and possibly increase breast cancer risks. Yet, for reasons that are unclear, high doses of progestin alone have proved helpful in relieving hot flushes in women who can't take estrogen because of their risks for breast cancer. Testosterone may also be given, either alone or in combination with other hormones, to women suffering from loss of libido unrelated to psychosocial factors or discord with a partner.

**Tailoring Treatment to the Patient**

While most studies of HRT conclude that increased risk factors and adverse reactions are related to the dose and length of treatment, controversy remains regarding method of administration, appropriate doses, and efficacy of long-term therapy. For this reason every regimen must be individualized to the patient's symptoms, lifestyles, and medical history.

**Alternatives To HRT**

When a woman chooses not to take or must discontinue HRT, patient education and support will help her understand and accept the changes she'll likely experience and maximize her sense of well-being.

* **To reduce the frequency and severity of hot flushes,** patients can perform frequent physical exercise, biofeedback, relaxation techniques, acupuncture, yoga, and mediation. These may be particularly useful when combined with other strategies like wearing clothes in layers, avoiding high necked garments, and choosing fabrics that "breathe". Limiting caffeine and alcohol intake, avoid cigarettes and hot foods and beverages, and drink plenty of water. Evening of Primrose oil and vitamin E capsules have reportedly been successful in eliminating severe hot flushes. Drugs such as Catapres, Naprosyn, Narcan, sedatives and tranquilizers are as successful as hormone therapy in reducing hot flushes and in some women they may have undesirable effects.

* **Vaginal Dryness**

Women should learn to perform daily pelvic floor (Kegel) exercises, which strengthen the pelvic and urogenital muscles.

* **Lethargy, Anxiety, and Depression**

Follow a program of regular moderate exercise, eat a nutritionally balanced diet, and limit or quit smoking. Stress reduction techniques such as relaxation exercises, yoga, and mediation may also be beneficial.

Relief may also be found by ingesting phyto-estrogens. These naturally occurring estrogen-like substances are found in some plants, including alfalfa, aniseed, basil, sage, parsley, beans, caraway, fennel, fenugreek, and soybean sprouts.

* To counteract the effects of bone loss and keep a balance between the body's sloughing and building of bone, mechanical stress and a dietary supply of calcium, phosphorus, and small amounts of various other nutrients are needed. Patients may perform weight-bearing exercises, such as walking, dancing, jogging, bowling, golf. Cigarette smoking also reduces bone density. So Quit. Calcium taken at bedtime may reduce overnight bone loss.

* To reduce the risk of CVD you need to perform regular aerobic exercise, quit smoking, and maintain a healthy diet low in fat and sugar. Regular low-dose aspirin has been proven to decrease clot formation, and beta-carotene and vitamin E have been credited with reducing the risk of myocardial infarction and stroke.

* Patients may use skin lotions and moisturizing creams to combat dry skin. Limit exposure to direct sunlight and use a humidifier in your home if you have dry hair.

**NEXT WEEK: Perimenopause**