

Thyroid Disease and Menopause

An Analysis From Patient Advocate and Educator, Pat Rackowski

Thyroid hormones operate in a complex hormonal environment that includes ovarian, pituitary, adrenal and pancreatic hormones, neurotransmitters such as serotonin, and hypothalamic and pineal hormones that will not be addressed here. Dr. Winifred Cutler, the biologist, calls this the "Hormonal Symphony."

We have little knowledge and no working model of the interrelationship of these hormones, but that is no excuse for ignoring the relationships that have been noted, as often happens when women visit their gynecologist, then their endocrinologist, and then their psychiatrist. It is also no excuse for denying that such relationships exist.

Dr. Elizabeth Vliet has written a very interesting book called "Screaming to be Heard: Hormonal Connections that Women Suspect and Doctors Ignore", which begins to address some of the connections between hormones in the common female problems of migraine headaches, hypothyroidism, PMS, menopause, chronic fatigue, fibromyalgia and allergies.

This article contains some of her ideas, as well as those of Dr. John Lee from his book "What Your Doctor May Not Tell You About Menopause". It's also influenced by my own experiences as a woman who is (now) hypothyroid (after radioactive iodine) and who is now in perimenopause, and by conversations with my endocrinologist, Dr. Kenneth Blanchard, at Newton Wellesley Hospital in Newton, MA.

It's All About Balance

Menopause happens when a woman's ovaries run out of viable eggs, and stop making enough estrogen and progesterone to produce a menstrual cycle. For many women this happens gradually and comfortably and they have a very easy time at menopause. In postmenopause, they quickly establish a new hormone balance with lower levels of both hormones, and they experience few uncomfortable symptoms.

Other women experience a lot of difficult symptoms. Progesterone declines before estrogen, or estrogen declines precipitously instead of gradually, or both hormones are produced erratically for one to a dozen years before menopause, creating hormone imbalances which cause symptoms such as mood swings, depression, anxiety, food cravings, heavy bleeding cycles, growth of fibroids, muscle and joint pain, short cycles and cyclical headaches. It can begin to seem like permanent PMS.

Thyroid abnormalities can create menstrual cycle problems, even infertility, in younger women; in perimenopausal women these problems are often exacerbated. Thyroid is related to reproductive hormones in two ways. First, thyroid hormones regulate metabolism, which is often mistakenly thought of as how fast you burn up calories, but is actually defined as "the activity of the cell." Different cells, such as brain cells, bone cells and ovarian tissue cells, have different activities. Thus thyroid affects many physiologic activities of the body, including reproductive gland activity.

Secondly, thyroid hormones have similarities with certain metabolites of estrogen and progesterone, and receptor sites for thyroid uptake can be blocked or facilitated by estrogen and progesterone. Imbalances of thyroid hormones T3 and T4, combined with imbalances of estrogen and progesterone, can produce many different consequences in the areas of mood, temperature regulation, fluid retention, energy and sleep. It's sometimes very difficult to answer the question, "Is it my thyroid, or is it menopause?"

Many doctors would say that sure, an untreated thyroid problem could contribute to infertility, PMS, and menopause symptoms, but if your thyroid readings are in the normal range, it isn't implicated. Here I will simply add that I personally know women who have successfully overcome infertility by being treated for

subclinical hypothyroidism, who have been cured of PMS with T3 added to their formula, and who have been able to eliminate hot flashes that came every 20 minutes day and night by taking kelp supplements, an iodine source for thyroid support. All of these women had TSH values in the so-called normal range.

Some Typical Imbalance Patterns

Estrogen is a hormone "messenger" molecule that has receptor sites in many locations of the body: uterus, vagina, breasts, bones and brain are the major sites. Estrogen stimulates the growth of the uterine lining each month to prepare it for implantation of a fertilized egg: estrogen "builds the blood". Estrogen is produced by the ovaries, by egg follicles, by the adrenal glands and in fat cells.

Progesterone likewise has many receptor sites: uterus, vagina, breasts, bones and brain are also among them. Progesterone thickens the inner lining of the uterus during the second two weeks of the menstrual cycle: progesterone "holds the blood" . Progesterone is produced almost entirely by the corpus luteum, a little mass of fat cells left over from the follicle after the egg leaves it at ovulation. At menopause, when ovulation ceases, progesterone is no longer produced except for a very small amount made by the adrenal glands.

A typical form of hormone imbalance is the "estrogen dominance" syndrome, described more fully in Dr. Lee's book . Estrogen dominance happens when there is not enough progesterone produced in the cycle to balance the effects of estrogen. Symptoms include swollen breasts, bloating, food cravings, mood swings, cyclical migraine headaches, lack of sexual desire, short cycles, heavy bleeding cycles, and fibroids growing.

Estrogen dominance is a pattern often experienced by perimenopausal women, and premenopausal women with subclinical hypothyroidism or T3 deficiency. Other potential causes of estrogen dominance are removal of one ovary, tubal ligation, and exposure to chemical endocrine disruptors. In premenopausal women, estrogen dominance is a common cause of PMS.

Treating women with PMS with anti-depressants, and likewise treating women with cyclical migraine headaches with Imitrex or other migraine medicines, only covers up a problem of hormone imbalance. If it even works. Sometimes these problems are caused by serotonin deficiencies or irregularities, but the production of serotonin itself is subject to thyroid sufficiency. Thyroid is a more basic hormone than estrogen and progesterone in the sense that proper functioning of the ovaries is dependent upon thyroid. The same goes for proper functioning of the brain and the production of neurotransmitters such as serotonin.

A mistake that is occasionally made with these type of PMS/menopause symptoms when the mood swings are severe is to label the patient "bi-polar" and treat them with lithium. Long term lithium use is a potential cause of hypothyroidism. Supplementation with natural progesterone could be tried instead, harmlessly, and if it worked, so much the better. Severe mood swings also indicate the need for testing for hypoglycemia and the trial of a hypoglycemic type diet, with protein and complex carbohydrate snacks every 3 hours. Uneven production of estrogen and/or progesterone can cause temporary hypoglycemia or hyperglycemia. (This is why transdermal hormone replacement with creams and patches, providing a fairly steady level of hormones, can help diabetic women through menopause.)

Another type of hormone imbalance involves steep drops in estrogen levels after ovulation and at menstruation. This is thoroughly described by Dr. Vliet's book mentioned above. Estrogen has two peaks and two drops in the month, and even more when cycles become irregular near menopause, or because of untreated hyperthyroidism or subclinical hypothyroidism. Some women are extremely sensitive to these drops, or the levels drop too precipitously resulting in cyclical migraine headaches, anxiety, palpitations, depression, night sweats and hot flashes.

The usual treatment for hormone imbalances such as these is "Low Dose" Birth Control Pills. These may work perfectly well for some women. Let me just warn, however, that "low dose" here means lower dose than they used to be. These birth control pills still contain at least four times the amount of hormones as in postmenopausal Hormone Replacement Therapy. Also, the oral contraceptives contain synthetic hormones, which are not an exact copy of the body's own hormones. In the case of synthetic progestins, they do not have all the beneficial effects of natural progesterone on mood, energy and fluid balance. In fact, synthetic progestins in birth control pills and in Provera, the progestin in PremPro and PremPhase, can cause worse mood swings, fluid retention and fatigue than you had before. In both cases, I recommend natural estrogen and progesterone, which are exact copies of our bodies' own hormones, made from soy and wild yam sources.

To find out the full story on natural hormones, read the book *Natural Woman, Natural Menopause* by Marcus Laux, ND and Christine Conrad. Low dose natural progesterone creams can be purchased over the counter in health food stores.

Natural estrogen and progesterone work better in our bodies than synthetic hormones, especially for women with thyroid problems. The synthetic hormones have different metabolites (break down products) that can interfere with our metabolism in ways that only complicate our original problems. Natural hormones used to rebalance our systems can help us to feel normal again. I'm sure you understand the principle of thyroid replacement in which the correct dose is the physiologic dose, not too much and not too little, just the same as our own bodies should have made. Natural hormones enable us to get physiologic doses of hormone replacement therapy.

Establishing a New Balance

As women progress through perimenopause and lose their periods entirely, they become postmenopausal. It's official when you haven't had your period for an entire year. Estrogen and progesterone are still made in the body, but at much lower levels.

For women with hypothyroidism, it's important to remember one thing at this time. If you are using a lot of phytoestrogens in soy foods, or if you are taking hormone replacement therapy with estrogen, you need to have your thyroid rechecked and rebalanced. Estrogens, whether from plants or from hormone replacement, can interfere with thyroid hormones at the receptor site and cause hypothyroid symptoms. Even if your blood tests are "normal", if you have symptoms of hypothyroidism, particularly fatigue, bloating, headaches, and depression, you may need to get your dose increased a bit.

If you have had a hysterectomy and are only taking estrogen replacement, you may feel better if you also take some natural progesterone. Progesterone balances estrogen in many ways, not just in the uterus. Progesterone counteracts fluid retention, enhances thyroid uptake and metabolism, and is also involved in building bone. The symptom of "crying for no reason" responds well with progesterone treatment. (See Dr. Vliet, Dr. Lee, and *The Menopause Manager* by Mary Ann Mayo and Dr. Joseph L. Mayo.) Provera, the synthetic progesterone, does not have the same beneficial balancing effects. Provera often causes bad moods, abdominal bloating, fatigue, and numerous other side effects.

Women age 50 and older should be tested for hypothyroidism every few years. By age 60, about 17% of women are hypothyroid. That makes it a very common problem, and it is often overlooked with the symptoms attributed to aging. In fact, among the elderly, hypothyroidism is sometimes misdiagnosed as dementia. Psychiatrists seem to be more aware of the problem than primary care physicians.

And speaking of physicians, if you are not getting the help you need from your ob/gyn, who may be more interested in delivering babies and doing hysterectomies than listening to perimenopausal women recount their woes, look for a menopause specialist.