

The Following information was accessed from the book Hypothyroidism, Health & Happiness by Steven F. Hotze, MD

Autoimmune Thyroiditis After Pregnancy

In women, autoimmune thyroiditis often occurs during or after pregnancy leading to postpartum hypothyroidism. This may be caused by the imbalance between the estrogen and progesterone hormones that occurs after delivery when progesterone levels plummet. This leads to estrogen dominance, which dysregulates that immune system.

Autoimmune thyroiditis often goes undiagnosed after pregnancy because the physician only orders routine thyroid tests and does not check for antibodies to the thyroid gland. When the routine thyroid blood test return within the “normal” range, the new mother’s symptoms are often attributed to postpartum depression, and she is prescribed antidepressant. This is tragic because antidepressants never resolve the problems caused by hypothyroidism, but they can cause a host of adverse side effects of their own. In this case, all the mother needs is desiccated thyroid USP and some bioidentical progesterone to restore her hormonal balance and get her feeling well again.

Sex Hormone Decline in Women

Why do more women suffer from hypothyroidism than men? Genetically, women are more likely to inherit autoimmune thyroiditis, which is one of the reasons why women are affected by hypothyroidism six times more frequently than men. The studies conducted at the Hotze Health & Wellness Center have demonstrated that 32 percent of the women and 18 percent of the men evaluated at the center had autoimmune thyroiditis. This is a much higher incidence detectable thyroid antibodies. Genetics aside, there is one more factor behind the higher incidence of hypothyroidism found in women, that being hormone imbalance.

Hormonal changes mark the seasons in a woman's life. Her hormones will fluctuate over the years: at the onset of her menstrual cycles, known as puberty; and during her monthly menstrual cycles, pregnancies and births, perimenopause, and menopause. Her hormones may become imbalanced at any of these crossroads.

The Dance of Hormonal Balance

How do hormones function and influence women's moods, feelings, and energy levels. Moreover, how does hormonal imbalance contribute to hypothyroidism?

- Estrogen is primarily a female hormone that is produced by the ovaries and stimulates cell division and promotes the proliferation of cells, particularly the inner lining of the womb (uterus). Estrogen is produced beginning on the day of the menstrual cycle and the levels vary throughout the menstrual cycle.
- Progesterone is produced by the ovaries after ovulation occurs, between days 15 and 28 in a normal menstrual cycle. Progesterone balances the effect of the estrogen hormone by maturing the inner lining of the womb, preparing it to receive new life. Progesterone promotes gestation, hence its name. It plays a protective role during pregnancy. During a normal menstrual cycle, estrogen dominates the second half until menstruation. Together, both hormones orchestrate this harmonious female monthly dance.

Progesterone is essential to thyroid hormone production; it stimulates the enzyme thyroperoxidase in the thyroid gland, which causes the production of thyroid hormones, T3 and T4, from the protein thyroglobulin. Progesterone also appears to enhance the thyroid receptors in the cells, making it easier for thyroid hormones to be assimilated.

Pregesterone is also an important brain hormone in both men and women.

Unfortunately, as the ovaries age, progesterone and estrogen can fall out of balance, resulting in a condition called estrogen dominance.

— WORD WISE —

Estrogen. We tend to think of estrogen as a single hormone, but it's actually a class of hormones consisting of three separate and distinct molecules: estriol, estradiol, and estrone.

Estrogen Dominance

Although a woman's menstrual cycle is a balancing act between estrogen and progesterone, estrogen has developed a bad reputation on the years. There are many reasons for this, which will be covered in more depth in a later chapter. However, what I have found in the treatment of tens of thousands of women is that estrogen is not dangerous as long as it is given in normal physiological doses in balance with progesterone. Estrogen dominance occurs when it is not in balance with progesterone. This is also correctly referred to as progesterone deficiency.

A number of factors can cause estrogen to dominate in the body, including the aging process. All hormones decline as we age. However, progesterone levels fall much more rapidly than estrogen levels. By the time a woman reaches menopause, her progesterone level is likely to be 1/120 of what it was in her twenties. In comparison, estrogen levels will have declined by only 40 percent by the time a woman reaches menopause. This is largely because the ovaries are not the only source of estrogen in the body. Fat cells produce estrogen as well. For this reason, postmenopausal women who are obese will have higher levels of estrogen than thin postmenopausal women. All of these factors contribute to creating estrogen dominance.

Pathway to Hypothyroidism

You may be wondering what all of this has to do with hypothyroidism.

Estrogen dominance also causes the liver to produce increasing levels of a protein called thyroid-binding globulin (TBG). TBG does just what its name suggests: it binds thyroid hormone in the blood, preventing it from being used by the cells of your body.

Imagine that you are walking up to your front door and just before you reach into your pocket to get your keys, someone jumps you and ties your hands behind your back and binds your feet. Now, what are your chances of unlocking the door with the key? When TBG encounters free thyroid hormone in your blood, it latches on to that thyroid hormone, making it no longer free and available to enter your cells and to regulate your metabolism. You may have adequate assimilated by your cells. This results in hypothyroidism. Every woman will inevitably develop estrogen dominance and experience the symptoms and develop the signs of hypothyroidism, to one degree or another, as she marches through her menstrual life.

Women's problems are further compounded by the fact that birth control pills and postmenopausal estrogen supplementation unbalanced by progesterone exacerbates estrogen dominance, leading to increasing levels of TBG and hypothyroid symptoms.

In contrast, the male hormone testosterone has no effect on TBG, and actually stimulates the conversion of the inactive thyroid hormone, T4, to the active thyroid hormone, T3, within the cells. It's no mystery, then, why women are much more likely than men to experience hypothyroidism.

Hysterectomy

During my surgical internship, I became familiar with the surgeon's motto, "a chance to cut is a chance to cure." Too often medicine chooses to remove the affected organ rather than to search for underlying cause of its diseased state. Hysterectomies often fall into this misguided surgical mentality. Broda Barnes, MD, was one of the first to point out the thyroid difficulty or untreated thyroid issues can lead to unnecessary hysterectomies. Barnes was a pioneer in the field of thyroid treatment in women patients

with hypothyroidism not only reduced unnecessary hysterectomies, but also controlled fibroid tumors, and eliminated ovarian cysts and excessive menstrual flow. Before we choose drastic measure, why not consider hypothyroidism and treat it appropriately?

Of course, once women undergo a hysterectomy, during which the ovaries are also removed, they are placed on hormone replacement therapy, which is usually Premarin, estrogen derived from pregnant mares' urine. Much of this mare-derived estrogen is not identical to the estrogen made by women. It is routinely given without providing progesterone to balance the estrogen. This throws women into a state of estrogen dominance.

Sex Hormone Changes in Men

Larry's job in sales required a high level of physical and mental stamina. Yet, over a six-year period, he noticed a decline in his drive and energy. His first doctor put him on Accupril for high blood pressure, and later, he prescribed Lipitor when Larry's cholesterol was elevated. Every time another symptom appeared, the doctor had another pill. It was affecting Larry's personal life. His Libido and sexual potency began to wane. Because of the latter, Larry also requested that his testosterone level be checked. The results revealed that his testosterone level was in the low range of normal for a man his age, but according to his doctor, "not low enough to treat." However, his doctor did have a drug for his erectile dysfunction: Viagra.

Let me make this crucial point. No man has erectile dysfunction or impotency because he has low levels of Viagra in his body. When men are entering puberty, their mothers don't wake them up in the morning and say, "Here son, take your Viagra today so that you can be a man." Young men don't need Viagra. Why? Their bodies are being flooded with high levels of testosterone. The primary cause of impotency in men as they age is the inevitable decline in testosterone. Your testosterone level should not be in the

“normal range” for a man your age. Rather, it should be in the range of a man in his prime age of 20.

Thyroid Converter

Testosterone is essential to converting the inactive thyroid hormone, T4, to the active thyroid hormone, T3. As testosterone levels decline, so do men's metabolism and energy level, and they begin to experience the symptoms of hypothyroidism. As their testosterone levels decline, they also experience a decline in their initiative, assertiveness, sense of well-being, self-confidence, goal orientation, drive, directedness, decisiveness, and analytical ability. They also lose muscle mass and tone. Of course, their libido wanes, as does their potency.

Because of the positive results that Larry's wife had experienced as a patient at the Hotze Health & Wellness Center, Larry finally made an appointment for himself. Larry's hormones were replenished using desiccated thyroid USP and testosterone. He began to eat a healthier diet and take vitamin and mineral supplementation. After a year on the wellness program, Larry's cholesterol and triglycerides returned to normal. He lost 30 pounds and the inner tube around his waist disappeared. More importantly, Larry regained his drive, his mental sharpness, his energy, and physical stamina. He had eliminated all of the pharmaceutical drugs that he had been prescribed. Larry was living large and feeling like a million bucks.

Reference:

Hotze, Steven F. MD (2013). *Hypothyroidism, Health & Happiness: The Riddle of Illness Revealed (101-107)*. Charleston, South Carolina: Advantage.