

Understanding Bio-Identical Hormone Replacement in Peri-Menopause and Menopause

Bio-identical hormones are compounded to match the body's natural hormonal composition. They are synthesized from soy or yams and are only available through compounding pharmacies. A woman's body produces three main estrogens. They are estimated to be in the following proportion: estriol- 50-80%, estradiol- 10-25% and estrone-10-25%. Although estriol is the weakest of the three, it is often the most plentiful.

Commercially available estrogens include products derived from yams or soy: Estrace (estradiol), Estraderm (17- β estradiol), Estring (estradiol vaginal ring), Estradot (estradiol patch) and Estrogel (17- β estradiol) as well as Premarin (conjugated estrogen derived from a pregnant mare's urine). These contain estradiol as their primary ingredient and have no estriol. Except for Premarin (conjugated estrogen), these medications are considered natural due to the yam or soy source. They are not bio-identical as they do not match the body's estrogen composition (eg. no estriol). Topical estrogen has the benefit of having less impact on increasing triglycerides, blood clotting, insulin levels, inflammation and weight gain. This is because oral estrogen undergoes metabolism through the liver, which appears to account for the negative effects listed above.

The Women's Health Initiative Trial (WHI) used Premarin (conjugated estrogen) and Provera (synthetic progesterone) which showed an increased risk in heart attacks when the therapy was initiated 10 years or more after the patient had entered menopause. This has led to the recommendation that women who are candidates for hormone therapy should start soon after entering menopause and should not use it for the sole purpose of preventing osteoporosis and heart disease. Numerous other studies using natural progesterone have shown its' beneficial effects over the synthetic form (Provera (medroxy progesterone)). The WHI also used an oral form of estrogen rather than a topical route of cream or patches.

As women enter into peri-menopause, progesterone begins to decline at a greater rate than estrogen. This can leave women with symptoms of estrogen dominance such as: breast swelling and tenderness, depression, fatigue, anxiety, foggy thinking and insomnia. Hot flashes and night sweats can begin at this stage as they are the result of hormone imbalance and not low estrogen. Therefore, many women start therapy with a progesterone –like herb called Femaprin (Vitex) or a prescription compounded natural progesterone cream. Natural progesterone is processed in the body to form testosterone and estrogen, while synthetic progesterone is not properly processed. Topical forms of progesterone are measured by a syringe allowing for accurate dosing and the ability to make small dosage adjustments. In addition to supplementing with progesterone, the natural product I3C (found in cabbage and broccoli) promotes healthy metabolism of estrogen to help correct symptoms of estrogen dominance.

the possibilities are endless...

As women become menopausal, their ovaries stop producing estrogen and progesterone but still continue to produce testosterone. The adrenal gland becomes the main source for production of these hormones. Menopausal symptoms include hot flashes, night sweats, vaginal dryness, problems remembering, decreased concentration, etc. In women whose testosterone production has decreased, symptoms of low sex drive, fatigue and decreased muscle tone are often found.

After a complete hysterectomy, where the ovaries are entirely removed, testosterone production can be reduced by up to 50%. Estrogen and progesterone production will fall as well. The adrenal gland will then be responsible for the production of these hormones.

As the adrenal gland plays such an important role in hormone production in menopause, it is important to assess adrenal functioning. If there have been large stressors in a person's life (poor health, work stress, family issues), this can eventually lead to "burnout" of the adrenal gland as it tries to produce cortisol. After years of stress without adequate rest and proper nutrition, the adrenal gland cannot produce the levels of cortisol required to provide the energy required during the day. Specialized vitamins and herbs along with yoga and meditation can be useful in restoring adrenal function. An excellent questionnaire to assess adrenal fatigue is available through www.adrenalfatigue.org/burnout-questionnaire.

Compounding pharmacies are able to order the raw ingredients of DHEA, estriol, estradiol, estrone, progesterone and testosterone to compound creams and capsules that match the body's composition. Based on a woman's symptoms, medical and family history, blood and/or saliva testing, appropriate compounds can be recommended.

Feel free to contact us for more information on bio-identical hormone replacement, herbal products and vitamin supplementation during menopause. Hormonal saliva testing kits are also available and sent to the Rocky Mountain Analytical Lab in Calgary.

Appointments can be made for a women's health consultation. Visit our website for more information on how to prepare for such an appointment.

*All compounds require a prescription

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