

## HOT FLASHES, NIGHT SWEATS, SLEEP DISTURBANCES, MOOD SWINGS...ESTROGEN DEFICIENT? MAYBE NOT!

By Dera Leigh Stalnaker, PharmD MD News, January 2006

As a clinical pharmacist specializing in women's health and bio-identical hormone replacement therapy, I constantly encounter women who have been prescribed estrogen, whom in many cases are not estrogen deficient at all. My mother just happened to be one of those women. She was in the midst of menopause while I was in pharmacy school in Birmingham, Alabama. We have a family history of breast cancer, so for four years I watched as she tried to "tough" out the many menopausal symptoms that bombarded her. I imagine that the breaking point was the sleepless nights of sweating and merely waking up for no apparent reason with the inability to go back to sleep. This, in turn translated into fatigue throughout the next day, foggy thinking, and changes in her mood and emotions. Not to mention those hot flashes...all day everyday! Finally, out of desperation she decided that it was time to seek HRT, so I encouraged her to see her physician for some much needed relief. The result: a prescription for conjugated equine estrogens. Sounds reasonable, right?

I presume that this is when my passion for hormone balance began. Perhaps it is because I just happened to be studying pharmacology, pharmacokinetics, and pharmacodynamics at the time and it spurred my interest learning and researching exactly what my mother was being prescribed. It wasn't necessarily the fact the she was about to take something extracted from a pregnant mare's urine that bothered me...after all I knew that estrogen worked on estrogen receptors endogenously, regardless of the source of the hormone. The metabolism of the synthetic hormones was, however a source of concern. It was when I revisited, researched and really began studying endocrinology and reading the WHI studies that the importance of testing hormone levels became apparent. How do we know that she needs estrogen? Through my research, I knew that hot flashes and night sweats could be rooted from 3 possible imbalances: estrogen deficiency, estrogen excess, or progesterone deficiency. I also knew through my research that saliva testing for steroid hormones had recently surpassed serum testing in terms of accuracy. Saliva testing is a newer means of testing hormone levels. It measures only the fraction of hormones that have left the bloodstream and are active in the tissues of the breast, uterus, brain, bones and skin. This "bioavailable" measurement gives us a clearer clinical picture of the hormones that are actually making it out of the bloodstream into the receptors where they can do their work. Blood work doesn't differentiate the bioavailable hormone from the hormones that may be protein bound in the bloodstream and never make it to the receptors. In turn, saliva testing can detect long hidden hormone imbalances and more closely correlate with the clinical picture. Have you ever had a patient that has had serum testing for hormone levels that do not match up to their clinical presentation or symptoms? For example a patient who is symptomatic, but their blood work returns showing that everything is within therapeutic range. I see this daily. To the patient, it makes them feel as if they are "going crazy" or that this is all in their head. This also gives rise to the overuse or misuse of antidepressants to help these women "deal" with these symptoms. In so many cases, hormones are the root of their symptoms. When I see a patient who is suffering from hormone related symptoms whose blood work reveals "normal" serum levels, I immediately do a saliva test. To date, 100% of these cases have been solved because the saliva test indicates exactly where the imbalance lies.

In my mother's situation, I encouraged her to hold off on the estrogen until we did a salivary hormone panel to see exactly what was contributing to her symptoms. When the results returned: estrogens (estradiol, estrone, estriol) were within normal range. Progesterone, on the other hand was so low that the test was not sensitive enough to detect any at all. Dehydroepiandrosterone (DHEA) and testosterone were within normal range. She began an individualized dose of

progesterone specific for her in a transdermal drop delivery system. She is no longer having any hot flashes or vasomotor symptoms, sleeps consistently through the night, feels as if the "fog" has been lifted regarding her memory, moods have leveled, and can tell a major increase in her energy level. I would not be writing this editorial if this was an isolated case. The majority of women that have been through consultation and testing have results that are very similar. Determining which hormones could potentially be causing their symptoms and checking their hormones levels to determine the exact imbalance is a crucial piece to the hormone puzzle.

So...hot flashes, night sweats, sleep disturbances, mood swings... estrogen deficient? No, not always. Unfortunately, my mother's case is not unusual at all. When her results returned, I realized that there were potentially many other women in her same situation that are being treated with estrogen that they do not need. These may be the women that you see who experience weight gain upon beginning estrogen, develop breast tenderness, headaches, nausea, or see no symptomatic improvement. These are just a few of the symptoms of estrogen dominance (and estrogen excess). Estrogen dominance refers to a prolonged state of estrogen excess (particularly in relation to progesterone) common to the waning of reproductive hormones with age, but exacerbated by exposure to the plethora of synthetic xenohormones such as HRT, pesticides, and pollutants in our environment.

Understanding the delicate hormone balance sparked my interest and passion in my desire to focus my career toward women and hormones. I did just that. I am a Doctor of Pharmacy specializing in Women's Health and Bio-Identical Hormone Replacement Therapy. The heart of my career revolves around helping women and their physicians balance their hormones with bio-identical hormone replacement therapy. Many physicians refer their patients to me for consultation, testing and evaluation. When the patient's test results return, I fax the practitioner a copy of their results and a graph of their symptoms, complete with a recommendation for initiating bio-identical hormone replacement customized to fit each woman. One dose certainly does not fit all, especially when dealing with the delicate balance of hormones.