

## Bio-Identical HRT – Why Not?

There has been much that has been said in the media about HRT, especially since the Women's Health Initiative (WHI) study was stopped prematurely due to the “*overwhelming*” number of breast cancer cases from one specific arm of the study, i.e., the women taking Prempro®. So why would I tell you that unless you positively cannot take hormones due to cancer history, that you need to be on hormones? Simple...the WHI “lied” to you and told you what they wanted to say on their political agenda and not the whole truth. Are you really that surprised?

Since the WHI results came out so heavy-handed in the media including *Good Morning America* and *Oprah*, let's do a quick review of their results as published and *not* what they told people.

Here are but a few problems with the study (and now researchers have stopped their squealing and are actually starting to see the problems with the study):

1. The women were self-selected for the study so that if a woman, who had been on hormones, stopped the hormones to participate in the study and had severe symptoms (hot flashes, night sweats, etc.) then she should *not* participate in the study. This does not allow for a good cross-sectional sample of women.
2. The women on the Prempro® or Premarin® were never adjusted on the doses. Since everyone is unique, you need to adjust the doses for the person individually and that was never done, thus some women were receiving too much hormone.
3. The hormones were not bio-identical, i.e., they were derived from horses and, while they have some hormonal effects on humans, that was not what

they were made for. In addition, they were taken orally so the liver had to process relatively high levels of hormones on a routine basis, which can lead to problems with obesity and fatigue.

4. Now for the dirty little secret that you had to actually read the study to see. ***More women who did not take the hormones died from colon cancer and from osteoporotic hip fracture complications than in the group taking Prempro® and no women died from taking the Prempro® during the study (from breast cancer).*** These were both statistically significant independent of each other.
5. If you were to believe their statistics, the actual risk for breast cancer that you would have every year from taking Prempro® would be ***8 chances in 10,000***. That was the *actual* risk but that didn't sound scary so they told you the *relative* risk, which is a higher number but irrelevant for what you know and understand about statistics.

After that study was so widely publicized with headlines in the major newspapers and all of the talking heads were spouting the dangers of HRT, women just stopped taking their HRT and they began to show signs of menopause with all of the nasty symptoms. Odd that approximately one month later, buried in the backs of newspapers and never talked about on the talking head circuit was that approximate 75% of all women who had stopped the hormones due to this study had since restarted the hormones. So now these women had to make a choice about what they took. They felt that they could not function without the hormones but they are told

that they will get breast cancer if they do take them (some choice!).

So now that you know the truth about the traditional HRT studies, what exactly is bio-identical HRT? *Bio-identical* HRT is exactly what it says. Hormones are designed to look human, though they are derived from natural sources, i.e., soy and yam. These are not “natural” hormones since that would mean that we derived them from ovaries and testicles (ick!). Instead, we started off with the soy and the yam extracts and *tweaked* them in a laboratory to make them appear human, i.e., bio-identical, so technically they are synthetic but they mimic nature.

So why should you take BHRT? The more important question would be, why not? If you were healthy while you were having menstrual cycles, your bones were strong, your cardiovascular system protected by hormones and your brain clear from dementia due to hormones, what do you think happens when these hormones suddenly stop being produced and doing what they are supposed to do? For example, estradiol (the primary estrogen you produce) is involved in over 400 different enzyme reactions in your body, either being essential or modulating the enzyme reaction. What do you think happens when the estradiol is no longer present? Testosterone is used for many different things in your body, only some of it dealing with your libido. Since you have receptors for testosterone in *every cell of your body*, it appears to be an important hormone (an understatement). And what happens when the levels drop due to menopause? I think you get the picture.

Which hormones do you need to replace once you have entered menopause or are past it? Well, that's easy...*all of them*. Unfortunately, that is not always the case when standard HRT is done,

i.e., only the estrogens and *progesterin* are replaced. There are some problems with that approach. *Firstly, where is the testosterone?* It was the number one hormone produced in quantity by your ovaries. You need testosterone...just not a whole lot. The standard way of replacing it, if at all, is orally (Estratest®), but that would mean it goes through the liver at a relatively high dose and this is not good for either you or your liver. Secondly, if you have a uterus, you are routinely given progesterin, aka Provera®, the “pro” in Prempro®. Not only is this *not* progesterone; progesterin is linked with weight gain, breast cancer, and depression, to name a few problems. So you should get *progesterone*. Now this can be given either orally in a micronized form, i.e., Prometrium®, or it can be given transdermally at a *prescription-strength* (not the weak forms given OTC at health food stores). In addition, it doesn't matter if you have a uterus or not, you **need** progesterone. You have receptors for progesterone in many parts of your body, including your brain. So why should you deny yourself the health benefits because some doctor believes that the only reason why God gave you progesterone was to maintain your uterus?

So how should you take bio-identical hormones? You should take them in such a way that your body cannot tell the difference between what you are doing now and what you used to do naturally. The only ways to do that would be through either transdermal cream or subcutaneously implanted pellets of hormones (both of which are done here).

The transdermal cream is compounded to your specific needs. It is covered under your insurance (for the vast majority of insurances) and we go through University Compounding

Pharmacy in San Diego for the prescriptions. We do that because they bill insurances and, more importantly, that is all that UCP does, i.e., compound medications. They are a very large and professional operation and we have never heard one complaint concerning the quality of their products nor their customer service. You will receive a container of a white cream that will have between three or four hormones (depends on if you want to take Prometrium® separately at bedtime or if you want it compounded in altogether). You would rub one gram ( $\frac{1}{4}$  tsp) along your inner arms *and* thighs every morning to provide you with your day's supply of bio-identical hormones.

The subcutaneously implanted pellets are done here at the office and are relatively painless. The biggest advantage is that you need to have it done about every three months and you are carrying around the medication with you so there is nothing to put on. Currently we do not have progesterone pellets but I am talking with a pharmacy in Kentucky that can start to make the pellets in the near future. So we can do estradiol and testosterone pellets with then Prometrium at bedtime (helps with sleep). If you have a uterus, I advise against taking the pellets due to some problems we have had with bleeding. Your insurance pays for the procedure (except for Medicare) and you pay for the pellets, which are currently \$20/pellet.

So the big question for you is, should you be on bio-identical hormones? The only people who have a direct contraindication are those women with estrogen-receptor positive breast cancer. At that point, the more important therapy would be testosterone replacement therapy with an aromatase inhibitor. This would provide much needed energy and help with maintaining muscle mass and

keeping fat down. You would need to speak with me about this particular case. For the rest of you, in my medical opinion the benefits far outweigh the risks. But ultimately, you need to consider all aspects of your health and then you decide.

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