The Natural Hormone Relief Report © A review of bio-identical hormone support therapy

Whether you already know something about bio-identical hormone support therapy, or are completely new to the concept, I would like to walk you through how it is used in clinical practice to help women with a wide range of hormone deficit or imbalance challenges.

Before we get into details and answer common questions, I'll start by sharing who I am and how I've come to offer this therapy option in my medical practice I'm Jeff Baker, an M.D. physician in practice now for 38 years, the last 26 here in Northwest Arkansas. I started my medical career as a full-service, board-certified Family Physician. During my first few years of medical practice, I met many women who were having hormone problems that did not respond well to the conventional therapy of the time. During those same years I also learned that we could obtain compounded bio-identical versions of female and adrenal hormones as an option to individualize therapy. I'll discuss that in further detail as we go along. By augmenting the baseline levels and balancing the ratios of hormones like estrogen, progesterone, female appropriate testosterone, and at times adrenal building blocks for my patients I can address the root causes of many hormone related symptom clusters.

Let's discuss five clinical situations where Bio-identical Hormone Replacement Therapy (BHRT) can be especially helpful:

1. Menopausal transition deficits.

As you approach and then arrive at the time frame when your ovaries are going through the "we really are ready to retire" hormonal decline, ~80% of women will have some hormone deficit symptoms, and it's a long list of possibilities and variations. Most women will clear these with time...but how much time?... while others may have persisting deficit symptoms for years or even decades after menopause.

Often these women are told "you should be over that by now." Don't you love it when health professionals tell you that you should be better, when you're not?

In either case, this process can have a significant quality of life impact, for months and often years at a time. It is also happens during a time frame (40's-50's) when the symptoms can compound the other challenges many people begin to notice the early aging changes of mid-life: less stamina, harder to burn fat or build fitness, weight gain-especially around the middle, less emotional energy reserves: as in "it takes a lot less to irritate me', low grade depression, a reduced passion for life...in the bedroom and in general, dry or crepey skin, thinning hair, vaginal dryness and/or reduced sexual responsiveness, reduced mental clarity, and heat exchange problems-especially when they affect quality of sleep all headline this list.

This is a time frame when hormone support that is sufficient but not excessive can provide a baseline of support that limits deficit symptom expression. Again, the right amount and the right ratios of bio-identical hormone support that is individualized are the keys to both success and safety.

2. Perimenopausal deficits

There is a 2-3 year and for some even a 6–8-year time frame preceding menopause where hormone levels and ratios can decline significantly, even when you're still having periods. Symptoms during this time frame can also be difficult to assess if you are not having periods because you had a hysterectomy where just the uterus was removed, or because you are on an IUD, like the Mirena. Perimenopausal symptoms can be the same as those reviewed in the previous section, but often the onset is gradual and insidious, and one can "learn to live with them" for a long time before they approach a notable and later a potentially intolerable level.

During this time frame deficit or hormone imbalance symptoms can be managed with bio-identical support, where we still let the ovary "run the show" but add sufficient support to manage deficit or imbalance symptoms.

3. Hormone replacement after a total hysterectomy

After a procedure like this when the ovaries are removed, the levels of estrogens, progesterone and testosterone drop dramatically. If you are younger than your mid 40's, your adrenals may pick up some of the slack, allowing its building blocks to fill in some of the shortfall. But usually, the post-surgical deficit is considerable. Ongoing research shows that a lack of individualized hormone support in the years that follow can worsen several potential problems in the 50 plus age group including osteoporosis and cognitive decline. Bio-identical female hormone support after a full hysterectomy can fill in those deficits by individualizing the combination of hormones and their best dose for you.

4. Cyclic hormonal symptoms

Starting with puberty in one's teens, some women have an imbalance between estrogens and progesterone that can produce symptoms that may adversely color the last half of the cycle. These symptoms can include fluid retention, food cravings, breast tenderness, increased irritability, mood swings-even depression, being more susceptible to headaches...especially migraine, and heavy periods with cramping pain. These individuals are more prone to miscarriages, fibrocystic breast changes and pelvic problems like uterine fibroids and endometriosis. These situations often indicate that the person needs more progesterone support, which is safe to supplement and can significantly even out these imbalances. It can be a real quality of life game changer.

5. Hormone influenced medical problems

There are many gynecological problems like uterine fibroids, fibrocystic breast problems, menstrual cramps, migraines, endometriosis, or infertility where hormone imbalance is as much or more the root problem rather than just a side issue. In other general problems like chronic fatigue or fibromyalgia, a lack of healthy testosterone and progesterone levels can be a contributory factor.

While hormone balance alone may not fully manage these concerns, they are often such a key factor that when they are ignored, other measures that might otherwise be beneficial can fall short of the desired benefit.

If one of these situations applies to you, you may find the following FAQ section useful.

You can also call our office at 479-756-3251 or email us at immanuelclinic@gmail.com for questions or to schedule an appointment with us.

Some Frequently Asked Questions about BHRT

- 1. What are bio-identical hormones? We can use plants to derive steroid compounds that are remarkably close to the reproductive or adrenal hormones that our bodies make routinely. With some minor changes in a lab, these molecules can be made into exact matches for our own hormones. This 'exact match' factor is important because hormones bind to the receptors in our cells that trigger hormone biochemistry in an extremely specific manner. Molecules that are synthetic, or animal derived may not bind the same way, and some of the side effect profile attributed to hormone drug therapy were the results of some of these inexact matchups. Much of the dust up about the 'danger of hormones' was a complication of animal sourced estrogens or synthetic progestins; neither of which are used in bio-identical therapy.
- 2. How is BHRT different from other prescription hormone treatments? As we just reviewed, Bio-identical Hormone therapy (BHRT) uses exact match hormones. But more than that, it also uses the full range of hormones our bodies use, and we aim to give them in ratios that are a closer match to "how the body would do it if it could." One example of this is the estrogen family. The ovary makes three types of estrogen, and two of them: estriol and estradiol are useful for hormone replacement.

Normally most of the circulating estrogen is in the form of estriol, which is slightly weaker, but more breast protective; and only 15-20% is in the form of its much more potent cousin called estradiol.

Traditional hormone therapy used estradiol only drug forms, and this aggravated the estrogen family's potential for negative side effects. In BHRT we typically use an estriol/estradiol ratio of 80/20 which is closer to that produced by healthy ovaries. Another key factor in BHRT is the use of plant derived bio-identical progesterone, instead of the synthetic progestin family. As you will see in Question #6, the bio-identical form negated the breast cancer risk posed by the synthetic version.

3. How do we individualize therapy to find my right dose?

Part of this depends on where you are in your hormone life cycle. If you are post-menopausal, a serum, saliva or urine test for hormone levels done after you have started therapy can help us decide if the desired dose fits into the "enough to help, yet in a safe replacement" range. If you are still having periods, the estrogen and progesterone levels will vary tremendously through the cycle, so testing is less helpful. Testosterone remains much the same through a cycle, so this can be assessed for potential deficit. In both cases, your medical history and individual symptoms are the main criteria for selecting and modifying support therapy.

4. Why do you need a compounding pharmacy for the prescription?

The prescription ingredients for compounding bio-identical therapy are USP pure and regulated by both the FDA and state pharmacy oversight. They need to be combined in proportions that are specific to your situation. Compounding pharmacists have additional specialized training to be able to custom measure and mix the 4-6 hormone ingredients that are included in many compounded prescriptions. This service is rarely found in retail pharmacies.

5. Where do I find a compounding pharmacy? There are at least eleven compounding pharmacies in the greater Northwest Arkansas area, and there are several reliable pharmacies locally or nationwide that we can use for mail order if one of them is not located close to you.

6. How safe is this therapy?

It is important to look at safety studies in context. The negative concerns about hormone replacement therapy in general come from the long-time use of conventional pharmaceuticals such as animal derived Premarin or the synthetic progestins.

To a large degree these are the hormone ingredients which result in the adverse side effects that color the common view of potential hormone therapy safety.

When one uses hormones that are not exact matches for cell receptors, use amounts that are in excess for that individual or lack key supporting components like bio-identical progesterone it is hardly a surprise that you can get adverse results.

A good example of a study demonstrating this, along with the relative safety of bio-identical versions is the large French E3N study in the early 2000's where 80,377 women were studied for breast cancer risk based on the form of hormone replacement therapy used. It showed that the:

- 1) Risk for cancer was 1.69 times that of control (never on therapy) for women on estrogen/**progestin** combinations.
- 2) Risk for cancer was 1.29 times that of controls for women on estrogen **only** therapy, and
- 3) Risk for cancer was the same (not increased) as the non-hormone therapy control patients for women on estrogen plus progesterone (**bio-identical therapy**).

The key to hormone therapy safety lies in: 1) the <u>use of bio-identical</u> <u>hormone ingredients</u>, 2) the <u>individualization</u> of therapy to give enough hormone support to be of benefit, without being 'too much of a good thing', along with 3) <u>a preference for transdermal administration</u> to keep day to day levels even, minimizing the 'peaks and valleys' that are seen with oral or injectable versions.

7. Why don't you promote the recently popular 'pellet therapy' for HRT?

I've seen this work well for some patients, but here's a list of the reasons why I do not offer this version of therapy:

1) you can only put estradiol and testosterone in a pellet. Ideal therapy for all patients should also consider the use of progesterone and the more protective estriol version as the major bulk of the estrogen load, as well as adrenal support therapy at times.

So, when someone tells you that you can have a pellet inserted and then be able "to forget about it" for the next 4-5 months, they may be leaving out a key part of comprehensive therapy.

Let's say you took the other ingredients orally to augment what's in the pellet. You are now doing something every day, pretty much erasing the theoretical benefit of a proposed "it's only a 3-4 times a year pellet placement." In such cases, if the patient is not doing daily additive therapy, it is most likely leaving out key components of comprehensive therapy.

- 2) It's a bit of a guess as to what pellet dosage is "right for you." If the doctor guesses wrong, you are on for the full 4–5-month long ride, which may include symptoms of excess estrogen like fluid retention, weight gain, "the PMS that won't end", or excess testosterone levels which can translate to scalp hair loss, excess facial hair, or irritability and anger. These are the concerns and complaints I hear the most often from those who have tried pellet placement. I'd also have to admit that I may not be hearing as much from those who love the pellet form of therapy...they aren't looking for alternatives! You're going to see a mix of results and relative satisfaction from pellet insertion therapy.
- 3) If we want to check blood levels to see what the pellet delivers, when do we check? 1 month out? Or is it at 2,3-, or 4-months post placement? We would like to believe that the pellet delivery of hormones is the exact same week by week, but there are several variables involved. The pellets are often placed near the gluteal muscle, one of the larger muscles in the

body. This means that your physical activity could alter absorption patterns. Someone having to sit all day long will have a different absorption pattern than the Post Office letter carrier, a Customer Service rep at Wal-Mart-on her feet for 8 hours or someone who does a Zumba exercise class three times weekly. Levels will usually vary over time, which makes accurate hormone level testing difficult to assess.

Overall, a transdermal version of support therapy gives more complete bioidentical coverage with a greater degree of individualized consistency.

8. How long does it take to see results?

Once you start therapy, it takes ~5-14 days to achieve a new support baseline at the cell level. If we are moving in the right direction, the goal would be to see a benefit in managing hormone imbalance symptoms during the first month of use.

During the 2-3rd to 4-6th week of use we will often recalibrate the dose at the next refill, based on symptom improvement and at times also based on blood hormone levels. Our goal is to see a significant improvement for you by the time of the first routine office follow up at \sim 6-7 weeks.

9. What will this course of therapy cost?

I'd like to provide complete transparency on this for you. It's difficult to know your best options for support therapy unless the cost is also factored in. Here is an outline of your expenses through this process:

1. Your first office consultation is an hour's visit at \$360. Subsequent office visits are 30 minutes and cost \$130. During your first 3-6 months this typically totals \$490. Most in-between follow up and questions during this time frame are typically managed by direct email to me at no additional cost to you. If you are doing well, we may not need another office visit through that first year. If your situation is more complex, or you have other issues to address we may need additional visits in that time frame. Although we do not bill insurance directly, depending on your insurance plan many of them may reimburse you directly for these costs.

- 2. Lab work may be needed at the onset, although if you are not having periods or are not on current therapy, we can usually defer this to 6-7 weeks after the consultation when you are on prescribed therapy. Many insurance plans will pay for this if you have the coverage. I've found that insurance coverage should be investigated before blood work is done to avoid unexpected expenses. If you are paying cash, we can obtain a typical Female Hormone blood work panel from a reputable company like Life Extension for ~\$60-80.
- 3. The BHRT topical prescription. This can vary from one pharmacy to another and usually runs ~\$50/month.

Once your dosage is stable, they can usually fill a 90 day prescription at ~25-30% less per month. For women who may benefit from therapy which assists vaginal and pelvic rejuvenation, this prescription is also ~\$50 and covers 2-3 months of benefit.

10. Once I start BHRT, how long do I need to take it?

The simple answer to this would be: "for as long as it provides the benefits that meet your needs." If you are under 40, this often depends on how perimenopause looks, or how your menopause turns out for you.

If you are moving through or past menopause, it may depend on how severe or long lasting the menopausal symptoms are.

For those past menopause, it depends on whether the range of other nonreproductive benefits of these hormones provide an ongoing and useful supportive or protective role.

11. Does BHRT help problems that aren't specifically menopausal?

As previously mentioned, these hormones play multiple roles that are not just reproduction, fertility or even gender expression related. Many cells in the body have receptors for reproductive and adrenal hormones, and the beneficial amount of support is rarely the 'almost zero' levels seen after menopause or a full hysterectomy. Supporting these levels can assist the management of musculoskeletal disorders, mental health issues, autoimmune disease, and several others.

12. How do I get started?

You will need three things: 1) a physician or mid-level practitioner who is knowledgeable and experienced in prescribing individualized BHRT 2) capable compounding pharmacies that can accurately fill your prescription, and 3) your informed and motivated decision to explore your options for hormone support therapy. We have the first two right here in Northwest Arkansas, and the third is up to you. If you would like to make an appointment with me to learn more and to precisely define your therapy options, call us at 479-756-3251 or email us at: immanuelclinic@gmail.com

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