HRT Therapy For Women: 
Issues and Methods
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Each person is an individual. That may sound obvious but modern medicine often ignores differences for each patient. There are various options for ways that hormones can be administered and how individual variations may affect a particular choice. It is first important to understand what someone hopes to accomplish with hormone therapy. For some women, hot flashes are their main complaint, or maybe sleep disturbance from night sweats or poor sleep in general. Bleeding problems, fibroids, cramps, pain with sex or loss of libido may be the central problem. For other women, dry skin, dry eyes, vaginal dryness and infections are most disturbing. Long-term issues such as osteoporosis, Alzheimer’s and heart disease are important. A family history of breast cancer may be a concern, or perhaps you are a breast cancer survivor. Having confidence and comfort with hormone replacement therapy choices and the specific method to be used is extremely important. It makes no sense to obtain a prescription that you are uncomfortable with or afraid to use.

What are your hormones doing now?
To begin, a complete medical history of the patient is imperative. Past gynecologic issues are important, as hormone problems can affect the entire body. Weight changes, allergies, autoimmune diseases, bowel habits, migraines, and psychological issues can all be related to hormone issues. A physical exam will provide clues to female hormone status (along with the male hormones that women produce), thyroid, adrenal gland and pituitary gland function. I usually order a basic set of blood work to evaluate the ovary, thyroid and adrenal gland. If indicated, additional tests can be obtained to assess special areas of the pituitary, thyroid, adrenal, liver, cholesterol or diabetes.

Blood tests, saliva tests and urine tests
Some doctors exclusively use saliva testing or 24-hour urine collections. In most cases, I have found blood testing to be more consistent and reliable than saliva and it is usually covered by insurance. Progesterone tends to be concentrated in saliva and may give false high readings. Urine is an excretion product and may not reflect what is happening in the blood. Cortisol from the adrenal gland changes throughout the day, making blood testing difficult. For this and other special needs, saliva or urine may at times have an advantage and can
be ordered. These tests are less likely to be covered by insurance and may need to be paid by the patient.

**How do we begin?**
Using patient history, physical and laboratory data, hormonal issues can be assessed and treatment can begin to correct them. Some women tend to retain medication or absorb it very efficiently and a little can go a long way. Other women metabolize or excrete their medication rapidly and may need larger or more frequent doses. I usually start with low doses — if estrogen levels are very low, starting with too high a dose can be a shock to the system, creating hot flashes and PMS like symptoms. Over a few months, a comfortable level can be attained. After six to twelve weeks of therapy, new blood work will be drawn. Adjustments or changes are made as needed and in two or three months the process is repeated until the patient is comfortable. **A major advantage of bioidentical hormones is the ability to measure individual levels. This ensures that the levels are sufficient but more importantly, that they are not too high.** Overdoses are more dangerous than too low a level.

**What choices of therapy are available?**
Some commercial skin patches and creams contain bioidentical estrogen and can be effective. Compounding pharmacies buy the various hormones in powder form and the pharmacist will carefully weigh out the proper amount. These powders can then be combined with a carrier and placed in a capsule or tablet. Other tablets and troches are made to dissolve under the tongue. Hormones can be blended into creams or gels to be rubbed onto the skin or placed in the vagina. Suppositories can be made for vaginal or rectal use. Special solutions also exist to give drops under the tongue or as a rub-on liquid. If a topical skin preparation isn’t working, changing to vaginal, sublingual or going the oral route may be more effective.

**Should I avoid “first pass” through the liver?**
Orally swallowed estrogens lower bad cholesterol and raise good cholesterol, affording some protection from heart attacks. However, all estrogens (natural and synthetic) encourage the liver to make more blood clotting factors. Both of these effects are stronger if medicine is taken by mouth, because all food absorbed by the intestines goes directly through the liver. Clotting is more of a health concern in older women who may be a high risk for a heart attack or stroke. If women have not taken hormones for many years, their arteries and veins may have some damage. **This is very important for smokers, as cigarette smoke damages the lining of arteries.** Generally, younger women require higher doses of replacement hormones and also have healthier arteries and veins. I tend to reserve oral estrogens for younger women to meet higher hormone needs. I use topical or vaginal applications in older women as there is potential for risks and hormone level needs tend to be lower.

**If I have a problem, how patient should I be?**
If you have a reaction to one of the medications or think you are experiencing side effects, stop the medication and contact the office. If you don’t feel any change, have some patience.
Follow-up visits
To be safe, we usually start with a low dose — it may take a while to feel improvement. Additional blood work will continue every two to three months until ideal hormone levels are achieved. **Once stable, reevaluating once or twice a year should be sufficient.**

What if things have changed?
For women transitioning into perimenopause, ovary output starts changing. Estrogen excess may decline and even revert to an estrogen shortage. If you feel that your body has gone through some changes, we may retest the hormone levels. **IMPORTANT: Proper therapy requires meeting current needs of a patient — not last year’s reading levels.**

Is long-term therapy dangerous?
Hormone balance can be beneficial throughout a woman’s life. For young women who had their ovaries surgically removed or lost function prematurely, we attempt to restore age appropriate levels. In later life stages, I find that lower levels of estrogen are needed for the patient to remain comfortable. Progesterone levels must be in proportion to estrogen and adjusted to maintain proper balance. Since target estrogen levels generally decline with age and blood clotting risks tend to increase, I often move from oral to topical forms of therapy in older women. I have found testosterone levels to be fairly steady across a wide range of age groups. Many people in their 20s and 70s have similar levels — if testosterone is needed, a number of replacement methods are available.

**Additional reading:** Why Should Women Take Replacement Hormones: The Benefits of Hormone Therapy.