

Bio-Identical Hormone Replacement for Menopause - Addressing the Mis-Information (Hormones in the News)

By Lisa Everett Andersen, RPh, CCN, FACA, FIACP

Headlines about hormones can be both accurate and deceptive. It is accurate to report that drugs such as Premarin® and Provera® are poor medication choices based on their risks and benefits. It is deceptive to suggest the same risks and benefits apply to natural or bio-identical hormone replacement.

The stories are old news to those who understand the differences between bio-identical hormones and those that are synthetic: Premarin®, Provera®, and other non-human hormones are not safe for humans. Worldwide research, studies, experiments, and the drug manufacturers' own warnings long ago demonstrated the negative effects of these drugs. Many published clinical trials have already reported that the risk of breast cancer is increased by long-term use of Premarin®, and increases even more when Provera® is added to the regimen. Many patients intuitively know something is not right with these synthetic hormones, and studies are affirming these convictions.

An important study is The Women's Health Initiative Hormone Therapy Trials. This study was not conducted using human (bio-identical) estrogens and progesterone. Instead, they administered Premarin® and Provera® (Prempro®) to the participants. In addition, it is documented that all hormones, when administered in an oral tablet like in this study, stress the liver and gallbladder, produce carcinogenic metabolites, and have negative effects on the body like an increased risk of stroke.

The situation is analogous to the history of insulin use in diabetes. Until the early 1980s, the only insulin hormone available to give to diabetics was from cows and pigs. While this complex molecule from these animals is almost identical to human insulin, it differs by one or two amino acids. This seemingly small difference is enough to cause critical long-term problems in people.

When drug companies were able to manufacture the exact human insulin molecule in large quantities, it was proclaimed a major breakthrough in healthcare. Now, every patient prescribed insulin is given the exact same molecule that is unique to humans. Why should hormone replacement be approached any differently? It only makes sense to use human (bio-identical) molecules. And every day more and more evidence supports the use of bio-identical hormones and the restricted use or elimination of synthetic or non-human hormones. It is unfortunate that the lay

press, scientific studies, and even educated healthcare providers often group all forms of hormone replacement together as if they are a single medication. In reality, women's experiences and clinical outcomes of hormone replacement differ vastly depending on if the hormones are synthetic or bio-identical, and what is used as the route of administration (i.e. troche versus creams versus pellets versus capsules and tablets).

In addition, unlike mass-produced hormones, bio-identical hormones can be custom-made to match the exact needs of the individual. Bio-identical hormones that are individualized and compounded into drug delivery systems that bypass the liver and digestive tract allow for maximized benefits without side effects. An estimated two million women are now benefiting from bio-identical estrogens and progesterone.

The news reports also have neglected the reason 90% of all women take hormone replacement: to relieve menopausal symptoms like hot flashes, vaginal thinning and dryness, loss of libido, osteoporosis, decreased energy and motivation, forgetfulness, anxiety, thinning hair, and bladder disorders. Evidence continues to support bio-identical hormone replacement as a safe and effective option for symptoms of menopause.

References

- Everett Andersen L. (2020). *Learning To Thrive in a Toxic World and the Impact of Clinical Endocrinology and BHRT, A Reference for Healthcare Practitioners and Patients*. Traverse City, MI: Mission Point Press
- American Diabetes Association. (2019, July). The History of a Wonderful Thing We Call Insulin.
- Dalton K. (1973, January). Progesterone Suppositories and Pessaries in the Treatment of Menstrual Migraine. *Headache*, 12(4), 151-59.
- deLignieres B., Dennerstein L., Backstrom T. (1995, April). Influence of Route of Administration on Progesterone Metabolism. *Maturitas*, 21(3), 251-57.
- deLignieres B., deVathaire F., Fournier S., Urbinelli R., et al. (2002, December). Combined Hormone Replacement Therapy and Risk of Breast Cancer in a French Cohort Study of 3175 Women. *Climacteric*, 5(4), 332-40.
- Frempong B., Ricks M., Sen S., Sumner A. (2008, June). Effect of Low Dose Oral Contraceptives on Metabolic Risk Factors in African American Women. *J Clin Endocrin Metab*, 93(6), 2097-103.
- Holtorf K. (2009, January). The Bioidentical Hormone Debate: Are Bioidentical Hormones (Estradiol, Estriol, and Progesterone) Safer or More Efficacious Than Commonly Used Synthetic Versions in Hormone Replacement Therapy? *Postgrad Med*, 121(1), 83-85.
- Hotze S., and Ellsworth D. (2008, Summer). Point/Counterpoint: The Case for Bioidentical Hormones. *Journal of American Physicians and Surgeons*, 13(2), 43-46.

- Nahoul K., Dehennin L., Jondet M., Roger M. (1993, May). Profiles of Plasma Estrogens, Progesterone and Their Metabolites After Oral or Vaginal Administration of Estradiol or Progesterone. *Maturitas*, 16, 185-202.
- O'Sullivan A., and Ho K. (2000). Route-Dependent Endocrine and Metabolic Effects of Estrogen Replacement Therapy. *J Pediatr Endocrinol Metab*, 6, 1457-66.
- Roberts J. (2012, September). Estrogen Metabolism Within the Framework of Bioidentical Ovarian Hormone Replacement Therapy (HRT).
- Rossouw J., Anderson G., Prentice R., LaCrix A., et al. (2002, July). Risks and Benefits of Estrogen Plus Progestin in Healthy Postmenopausal Women: Principal Results From the Women's Health Initiative Randomized Controlled Trial. *JAMA*, 288(3), 321-33.
- Rosano G., Webb C., Chierchia S., Morgani G., et al. (2000, December). Natural Progesterone, but not Medroxyprogesterone Acetate, Enhances the Beneficial Effect of Estrogen on Exercise-Induced Myocardial Ischemia in Postmenopausal Women. *J Am Coll Cardiol*, 36(7), 2154-59.
- Vail J. (2007, January/February). Pharmacogenomics: The End of Trial-and-Error Medicine? *IJPC*, 59-65.
- Xie H., and Frueh F. (2000, November). Pharmacogenomics Step Toward Personalized Medicine. *Personalized Medicine*, 2(4), 325-37.