



The Bio-identical Hormone Debate

A review published in the *Journal of Postgraduate Medicine*, January 2009

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The use of bio-identical hormones, including progesterone, estradiol, and estriol in hormone replacement therapy (HRT) has sparked intense debate. Of special concern is their relative safety compared with traditional synthetic and animal-derived versions, such as conjugated equine estrogens (CEE), medroxyprogesterone acetate (MPA), and other synthetic progestins. Proponents for bio-identical hormones claim that they are safer than comparable synthetic and nonhuman versions of HRT. Yet according to the South African Menopause Society, there is little or no evidence to support claims that bio-identical hormones are safer or more effective.

A comprehensive review, published in the January 2009 edition of *The Journal of Postgraduate Medicine*, evaluated the evidence comparing bio-identical hormones, with the commonly used non-bio-identical versions of HRT for clinical

efficacy, physiologic actions on breast tissue, and risks for breast cancer and cardiovascular disease.

Their findings were that bio-identical hormones have some distinctly different, potentially opposite, physiological effects compared with their synthetic counterparts, which have different chemical structures. Both physiological and clinical data indicated that bio-identical progesterone is associated with a diminished risk for breast cancer, compared with the increased risk associated with synthetic progestins. Estriol has some unique physiological effects, which differentiate it from estradiol, estrone and CEE. Estriol would be expected to carry less risk for breast cancer, although no randomised controlled trials have been documented. Synthetic progestins have a variety of negative cardiovascular effects, which may be avoided with progesterone.

To quote the authors conclusions: "Physiological data and clinical

outcomes demonstrate that bio-identical hormones are associated with lower risks, including the risk of breast cancer and cardiovascular disease, and are more efficacious than their synthetic and animal derived counterparts. Until evidence is found to the contrary, bio-identical hormones remain the preferred method of HRT."

To view the paper published in *Postgraduate Medicine*, in its entirety, it can be downloaded at no charge, from the home page of www.imcmed.co.za

To find out how to prescribe bio-identical hormones for your patients, contact the Compounding Pharmacy of South Africa, on telephone number 011 463 0310 or visit www.compounding.co.za

REFERENCE:

Holtorf, K.; The Bio-identical Hormone Debate: Are Bio-identical Hormones (Estradiol, Estriol, and Progesterone) Safer or More Efficacious than Commonly Used Synthetic Versions in Hormone Replacement Therapy? *Post Graduate Medicine*, Volume 121, January 2009.