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LETTERS TO THE EDITOR

To the Editor:

A review of bioidentical hormones was published in *Menopause* recently.[1] Bioidentical hormones are gaining popularity in the medical community and the general public opinion is that this form of hormone therapy (HT) may in fact be safer than conventional HT.[2]

There are two common prescriptions used by practitioners to treat women with menopause symptoms, Biest (estradiol + estriol) and Triest (estrone + estradiol + estriol) both either with or without progesterone.[3] These hormones can be custom compounded into oral capsules, vaginal suppositories, and topical creams. The practice of using estriol in doses higher than estrone and estradiol seems to be based on recognizing that estriol does have a weak, nonetheless significant, estrogenic effect,[3] and the limited evidence demonstrating higher physiological levels of estriol in premenopausal women.[4]

However, as identified in the Boothby et al[1] article, there may be a misperception in the general medical community as to how much estradiol equivalents actually exist in these compounded hormones. We agree with the authors, that 2.5 mg of Biest (2 mg estriol + 0.5 mg estradiol) would yield an estradiol equivalency of 0.525 mg, which is more than the current recommended dosage of 0.5 mg estradiol daily.[1] However, not noted in their review is that bioidentical hormones are often prescribed in twice-daily dosages resulting in 5 mg of Biest daily.[3] Thus, the estradiol equivalency of Biest is 1.05 mg per day, which is more than twice the stated recommended dosage for estradiol. This twice daily dosing strategy is also sometimes used for 2.5 mg of Triest, for a total of 4 mg of estriol, 0.5 mg of estradiol and 0.5 mg of estrone per day.[3] The estradiol equivalency conversion for Triest is more complex than that of Biest, yet the end result remains that Triest has greater equivalent estradiol than is recommended. Dosages as low as 1.25 mg of either Triest or Biest are sometimes also used; however, if given in a twice-daily dosage, this, too, may be in excess of the current recommended dosage of estradiol.

Although the Boothby et al[1] review includes topical progesterone and testosterone, examination of the nonoral routes of administration of estrogen therapy is warranted in the discussion of bioidentical hormones for perimenopausal women. There is evidence to support that transdermal estrogen therapy has a better safety profile than oral estrogen therapy for cardiovascular outcomes.[5] Topical bioidentical hormones may also prove in time to be superior to their oral counterparts; however, currently there is a paucity of scientific data regarding topical bioidentical hormones and cardiovascular outcomes.

We agree with the authors that oral estriol does not seem to attenuate cardiovascular risks and has no demonstrable benefit over conventional hormone therapy. Considering the recent controversy regarding hormone therapy in menopause, equal caution is warranted on the use of oral bioidentical hormones.

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In reply:

We thank Curcio et al for their comments regarding our recent review of bioidentical hormone therapy.[1] The questions raised by the authors regarding non-oral routes of administration of both estrogens and progestins merit further research. Purported differences in either efficacy or safety profiles remain to be proven. The paucity of data cannot be construed as "a better safety profile."

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REFERENCE

1. Boothby LA, Doering PL, Kipersztok S. Bioidentical hormone therapy: a review. *Menopause* 2004;11:356-367.