



## **ESTROGEN GETTING COOL RECEPTION FROM DERMATOLOGISTS FOR MIXED RESULTS IN IMPROVING APPEARANCE OF SKIN**

**BOSTON (July 29, 2009)** – For many women, hormone replacement therapy (HRT) can alleviate the physical symptoms associated with the change of life. But despite the initial hype generated by post-menopausal women who noticed a marked improvement in their skin’s appearance while on HRT, dermatologists argue that scientific studies of estrogen do not show definitive improvements for skin rejuvenation of photodamaged skin and the potential risks when used long-term outweigh any potential skin benefits.

At the American Academy of Dermatology’s Summer Academy Meeting 2009 in Boston, [dermatologist](#) Margaret E. Parsons, MD, FAAD, assistant clinical professor of dermatology at the University of California at Davis in Sacramento, reviewed studies that demonstrate mixed results when examining whether or not estrogen improves the appearance of the skin and why patients should opt for tried-and-true cosmetic therapies instead.

“Based on the research conducted thus far, it does not appear that topical or oral estrogens are a viable long-term solution for improving sun-damaged or [aging skin](#),” said Dr. Parsons. “In my practice, I do not prescribe estrogens for skin rejuvenation because of the lack of consistent data to support their use and the known risks of prolonged estrogen therapy – including an increased risk of breast cancer.”

Estrogens are a group of hormones that play a key role in regulating many aspects of a woman’s overall health, including reproduction. Certain parts of the body contain cells that are more receptive to the effects of estrogen than others, including the face. Dr. Parsons noted that estrogens benefit the skin in many ways, including an increase in collagen content, water retention and elasticity.

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During pregnancy when estrogen levels are at their highest, women experience thicker hair and glowing skin. On the other hand, post-menopausal women may notice that their skin does not have the same elasticity as it once did and that it is drier than normal.

In order to treat the most common symptoms associated with menopause – including hot flashes, mood swings and vaginal changes – physicians often prescribe hormone replacement therapy (HRT) to boost the body's estrogen levels that drop dramatically during this change of life. However, when the results of the Women's Health Initiative (WHI) study were announced in 2002, the way HRT was viewed to treat post-menopausal women changed significantly. For example, the WHI study found that women on long-term HRT could be at an increased risk for breast cancer and that the overall health risks of this therapy could outweigh the possible benefits. From that point on, HRT was prescribed more conservatively with lower dosing options and individualization based on each woman's own health history.

Since there were reports of some women on HRT noticing an improvement in their skin, studies were conducted to determine if these results could be validated. Dr. Parsons explained that results of multiple studies examining the relationship between estrogens and skin improvement were inconclusive.

For example, one study examined whether low-dose hormone therapy improved aging skin in 485 women who were on average five years post-menopausal. Published in the September 2008 issue of the *Journal of the American Academy of Dermatology*<sup>1</sup>, the study concluded that estrogen supplementation did not provide any significant improvement in sun-damaged skin.

“Although this study found no obvious skin benefits in this particular group of women, another study that looked at women who began HRT at the onset of menopause – and did not wait to start treatment like the other group – did experience noticeable improvements in their skin,” said Dr. Parsons. “These

studies pose unanswered questions as to the timing and duration of prescribing HRT to produce skin benefits. For this reason, the jury is still out as to whether estrogens can be effective for aging skin.”

In addition, another study showed that applying topical estrogen to sun-damaged facial skin and sun-protected skin on the hip of post-menopausal women resulted in stimulated collagen production and less wrinkling in the sun-protected hip skin, but no noticeable improvement in the sun-damaged facial skin.

Dr. Parsons added that more research will likely continue in the future to examine the possible benefits of estrogen for improving aging skin. Until then, she stressed that there are many effective therapies that dermatologists regularly use to address the common signs of aging – including retinoids, alpha-hydroxy acids and other topical therapies, as well as chemical peels, lasers, botulinum toxin and skin fillers, to name a few.

“The best advice I can offer my patients to improve their overall skin health is to wear sunscreen with a sun protection factor (SPF) of at least 30, don’t smoke and use a topical retinoid,” said Dr. Parsons. “When it comes to minimizing the cumulative effects of sun damage, an ounce of prevention really does go a long way.”

For more information on improving the appearance of your skin, go to the “AgingSkinNet” section of [www.skincarephysicians.com](http://www.skincarephysicians.com), a Web site developed by dermatologists that provides patients with up-to-date information on the treatment and management of disorders of the skin, hair and nails.

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<sup>1</sup> Phillips TJ Symons J Menon S et al Does hormone therapy improve age-related skin changes in postmenopausal women? A randomized, double-blind, double-dummy, placebo-controlled multicenter study assessing the effects of norethindrone acetate and ethinyl estradiol in the improvement of mild to moderate age-related skin changes in postmenopausal women. *Journal of the American Academy of Dermatology* 2008; 59: 397-404.