

## New study suggests Rx estrogen delivery through the skin may show safety benefits as opposed to oral delivery

March 26 2009

---

Transdermal delivery of estrogen therapy available by prescription "seems not to alter" the risk of venous thromboembolism (VTE), or blood clotting, in postmenopausal patients when compared to oral delivery, a new study suggests. The study was conducted by researchers at NYU Langone Medical Center and was published in the latest issue of *Menopause: The Journal of the North American Menopause Society*.

Prescription transdermal [estrogen therapy](#) is bioidentical to estrogen produced by a woman's ovaries before menopause and delivered through the skin. [Transdermal estrogen](#) is available in a variety of formulations which have been quality controlled and approved safe and effective by the United States [Food and Drug Administration](#) (FDA).

The team at NYU Langone sought to determine the effects of delivery of estrogen therapy on [postmenopausal women](#). Blood obtained from 84 postmenopausal women was tested for clotting activity before and after administration of oral or transdermal estrogen for a period of eight weeks. Women with borderline clotting issues showed "a significant acceleration" of clotting after oral estrogen therapy, but no significant change after transdermal estrogen therapy.

"Venous [thromboembolic complications](#) or [blood clots](#) represent an established risk factor of estrogen therapy, and evidence is now mounting that the route of estrogen administration influences this risk,"

said researcher Lila Nachtigall, M.D., Director of the Women's Wellness Program at NYU. "These new data on the safety of transdermal HT delivery may prove to be useful information for postmenopausal women deciding whether to take estrogen therapy and whether to take it orally or through the skin."

The research team studied platelet activity in the study participants' blood. Platelets serve a central role in forming pathological arterial thrombosis that causes myocardial infarction and stroke. The study's authors further concluded that the ability to identify postmenopausal women with an increased risk of arterial thrombosis or clotting before even starting estrogen therapy is an important goal to help physicians determine which women may be at the least risk to benefit from estrogen therapy.

"The effect of estrogen therapy on cardiovascular risk remains a point of controversy; however, these data suggest that estrogen delivered transdermally may not increase the likelihood of clotting for women who are at borderline risk," said Dr. Nachtigall. "This study supports the emerging data suggesting that oral, not transdermal estrogen may increase the risk of venous thromboembolism in postmenopausal women."

Source: New York University School of Medicine ([news](#) : [web](#))

Citation: New study suggests Rx estrogen delivery through the skin may show safety benefits as opposed to oral delivery (2009, March 26) retrieved 21 November 2023 from <https://medicalxpress.com/news/2009-03-rx-estrogen-delivery-skin-safety.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.