

Transdermal Estrogens: Absorption

In the beginning of a treatment protocol, during the phase of alleviating symptoms of hormone depletion, apply estrogen to the soft skin of the inner forearms

Once symptoms are well alleviated, move applying to additional sites, and rotating these sites

Over time, in consulting with your patients re their program, be cognizant re possible skin absorption issue--poor absorption- 'dermal fatigue'.

Over time, choose Bi-Est sites to rotate (eg inner forearm, outer thigh, posterior deltoid) and keep these sites exclusive for Bi-Est. Use other sites for progesterone, and keep those sites progesterone-exclusive.

*Don't Become a Victim of All-Too-Common
Errors in Bioidentical Hormone Replacement
Therapy*

Fundamental Error #2

Never Taking a Monthly 'Break'

Jonathan V. Wright M.D.

Townsend Letter December 2013,
365: 59 - 62

“continuous combined regimens conferred a 43%
greater risk for breast cancer than sequential regimens”

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*Bakken, K. Fournier, A. Menopausal Hormone Therapy
and Breast Cancer Risk: Impact of Different Treatments. Int
J of Cancer. 2011 Jan 1; 128(1): 144 - 156

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Take a break
from hormone Rx
Once every month



Umm, is that $\frac{1}{8}$ th tsp in the morning and a pill in the evening?



Or is it $\frac{1}{4}$ in the morning and $\frac{1}{8}$ at night... or $\frac{1}{4}$ of $\frac{1}{8}$ with a 50mg night cap?



It's hard to believe that our faces look so similar and our doses could be so different.



I think I have to apply it on day 3 or 8...or was it on my forehead or is it on my 45th birthday?



I think I'm going to need to enroll in medical school



Appendix
2d
Application

Dermal Absorption Fatigue

Over several years time, many women using transdermal estrogen preparations have progressively lower urinary estrogens. Sometimes these lower levels are reflected in symptoms, but sometimes (particularly in women who've used bio-identical hormone replacement for longer periods of time) there are no symptoms of these lower estrogen levels. When the route of administration is then switched to intra-vaginal, with no change in dosage, the urinary levels rise once again to the target range, and any symptoms present of low estrogens disappear. We've termed this phenomenon dermal absorption fatigue. As it occurs often, we've switched our routine recommendation for site of bio-identical hormone administration to the intra-vaginal route.

Selected Observations from 23 Years of Bio-Identical Steroid Hormone Replacement in Clinical and Laboratory Practice by

Jonathan V. Wright M.D.

Ann N Y Acad Sci. 2005 Dec;1057:506-24

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Dermal Absorption Fatigue: Possible Remedies

Trans-peri-anal mucosal application

?

Trans-labial or Trans-vaginal application

Trans-vaginal Application: Issues with Possible Transmission & Urine Hormone Testing

Possible Issues:

- Estriol lingered in vagina
- Thus vaginal estrogens could:
 - o Be transmitted in intercourse
 - o Of no concern if no intercourse
 - o Interfere with urine hormone testing
- Remedy:
External Trans-peri-anal mucosa application,
... at least for during urine collection for testing



Measuring Devices for trans-perianal, trans-labial or transvaginal application

Progesterone 200 mg/ml
8.7 mg per drop

Bi-Est 30 mg/ml 80:20
0.44 mg_{est}/drop

Bi-Est can be made stronger:
more mg_{est}/gtt



Measuring Devices for trans-perianal, trans-labial or transvaginal application



1 ml syringe allows
delivery of 0.1 ml, or less
increments of dosage

Bi-est 15mg/ml 80:20
= 4.5 mgeeq/ml
0.1 ml = 0.5 mgeeq

Bi-est 10mg/ml 80:20
0.1 ml = 0.3 mgeeq

Can Transdermals be Transmitted to Spouse and others by Contact?

yes

But not a lot

And washing skin works

after 1/2 hour most of dose has been absorbed

Clothing and bedding may be a concern

I have done research on this possible transmission issue

Transdermal Estrogens: Transmission

If you have recently applied Bi-Est to areas of your skin that can touch a partner, and want to have contact with that partner, you can wash the skin well. Contact will be safe, with no transmission.

If you have touched someone soon after an application of hormones, and are concerned about possible transmission, they can wash.

