

Early Data on Compounded Transdermal HT

BY BRUCE JANCIN
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NEW ORLEANS — Compounded transdermal hormone therapy relieves menopausal symptoms while improving cardiovascular risk factors and inflammatory and thrombotic biomarkers, according to a preliminary study.

“By replacing the hormone that’s deficient via transdermal dosing it may be possible to more closely mimic normal physiology and favorably impact cardiometabolic clinical biomarkers.

“Despite FDA expressed concerns of dangers of compounded hormone use, our data suggest that transdermal compounded hormones may offer a safe and effective treatment for hormone-related symptoms when utilizing dosages targeting physiologic reference ranges and compounds, which meet USP standards for potency,” Dr. Kenna Stephenson said at the annual scientific sessions of the American Heart Association.

“Our study would suggest this is a superior way to treat women. Sure, Premarin [conjugated estrogens] gets rid of hot flashes, but it also increases C-reactive protein and increases thrombotic risk,” added Dr. Stephenson, a family physician active in clinical research in women’s health at the University of Texas Health Science Center at Tyler.

Her group’s ongoing study involves 150 women, mean age 51.9 years, with menopausal symptoms, who were randomized to usual care or individualized transdermal plant-derived estrogen, progesterone, testosterone, and dehydroandrostenidione therapy prepared by a compounding pharmacist.



After 12 months of follow-up, the women on transdermal therapy showed significant reductions in triglycerides, blood pressure, fasting blood glucose, C-reactive protein, plasma fibrinogen, insulin-like growth factor-I, and factor VII along with significant symptomatic and quality of life improvements (see chart). The study will continue through 3 years of follow-up.

Ever since analysis of data from the Women’s Health Initiative linked oral hormone replacement therapy to

increased risks of breast cancer and cardiovascular events, women with menopausal symptoms have expressed growing interest in alternative forms of hormonal therapy.

“In my clinical practice I would say every week I see a patient who’s already had an MI or a stroke, she’s in her 50s or maybe her 40s, and she’s been told she can never have hormones again,” Dr. Stephenson observed in an interview.

As in the ongoing study, her clinical practice is to take a history of hormone-related symptoms such as hot flashes, night sweats, mood changes, sleep deprivation, and unexplained fatigue, measure the patient’s sex hormone levels, and then prescribe a low-dose transdermal hormone compounded specifically for her. Transdermal therapy avoids first-pass hepatic metabolism, thereby preventing buildup of atherogenic sex hormone metabolites, Dr. Stephenson explained.

‘What I see in clinical practice as well as in my research studies is their biomarkers improve.’

DR. STEPHENSON

lifestyle changes: They feel like exercising; they feel like eating the way they’re supposed to,” the family physician continued.

She uses the university medical center’s compounding pharmacy. There are a growing number of such pharmacies around the country as a result of increasing applications for compounded transdermal therapy in pain medicine, oncology, dermatology, and sports medicine, as well as hormone therapy. She noted that

Changes in Women Placed on Transdermal Hormone Therapy

	Baseline	8 weeks	1 year
Blood pressure (mm Hg)	133/80	126/79	121/76
C-reactive protein (mg/mL)	6.2	5.8	3.9
Triglycerides (mg/dL)	175	154	120
Fasting blood glucose (mEq/L)	110	89	92
Fibrinogen (mg/mL)	4.6	4.4	4.0
Factor VII (mcg/mL)	1.1	1.1	0.9
Insulinlike growth factor-1 (ng/mL)	171	NA	151
Antithrombin (ng/mL)	341	341	329
Hamilton Depression score	6.6	4.9	5.0
Hamilton Anxiety score	9.6	7.0	6.5
Visual analog pain scale	1.5	1.2	0.9
Greene Climacteric Scale score	17.7	13.7	12.9

Note: Study population comprised 150 women with menopausal symptoms.
Source: Dr. Stephenson

interested physicians can locate a compounding pharmacist through the member registry maintained by the International Academy of Compounding Pharmacists (www.iacprx.org).

A home salivary specimen shipped to a CLIA-certified laboratory provides the most accurate way to assess a woman’s hormone status. “Traditional blood tests are not helpful, in my clinical experience. The reference ranges in serum testing for sex hormones are too broad,” Dr. Stephenson said.

She is the author of “Awakening Athena: Resilience, Restoration, and Rejuvenation for Women” (Hallsville, Texas: Health, Heart, and Mind Institute, 2004) a book that goes into the details of individualized transdermal compounded hormone therapy.

In January 2008, the Food and Drug Administration announced a controversial new policy of restricted access to medications containing estriol that could have a negative impact on compounded transdermal hormone therapy for women, since prescribing physicians are required to fill out an Investigational New Drug application. Resolutions have been introduced in both the Senate (S.Con.Res. 88) and House of Representatives (H.Con.Res. 342) calling on the FDA to reverse this policy.

A video interview of Dr. Stephenson discussing her study is available at www.youtube.com/watch?v=IXDC04nw86Q.

Soy Matches HT on Menopause Symptoms, but Not on Lipids

BY DAMIAN McNAMARA
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LAKE BUENA VISTA, FLA. — Soy supplements improved somatic and urogenital symptoms of menopause to the same degree as did low-dose combination hormone therapy in a small, randomized, double-blind controlled trial.

A total of 60 women who were 1-13 years past menopause were randomized to one of three groups: soy supplements containing about 90 mg of isoflavones; estradiol 1 mg/norethindrone 0.5 mg; or placebo daily.

After 16 weeks, women in the two treatment groups had significant somatic and urogenital symptom improvements, compared with baseline on the Menopause Rating Scale (MRS).

The changes were also significant, compared with scores among women taking placebo.

The findings suggest a role for dietary soy supplementation for improving hot flashes, joint and muscle pain, and vaginal dryness, with results equivalent to hormone therapy, said gynecologist Adriana O. Pedro.

“I thought that hormone replacement would be better than soy—so I was surprised,” said Dr. Pedro, of the State University of Campinas (Brazil), during a poster session at the annual meeting of the North American Menopause Society.

Women taking hormone therapy fared better, however, in terms of cardiovascular health markers. Women on the low-dose combination hormone

therapy showed improvement in total cholesterol and low-density lipoprotein levels; these levels were unchanged in those who got soy supplements.

In addition, total cholesterol decreased 12%, compared with baseline, in the hormone treatment group but remained unchanged in the soy supplement and placebo groups.

The LDL cholesterol level decreased 18% in the hormone therapy group and, again, did not change in the other groups.

“There was no change with soy—probably because they had normal lipid profiles at baseline,” Dr. Pedro said.

Levels of triglycerides, HDL chole-

sterol, and glucose; body mass index; blood pressure; and abdominal/hip ratio did not change significantly, compared with baseline, in any group.

Total MRS scores were reduced in all groups by 16 weeks. In addition, follicle-stimulating hormone decreased and 17 β -estradiol increased, compared with baseline, but only in the hormone replacement group. Psychological symptoms did not change over the treatment period in the soy, hormone replacement, or placebo groups.

Data analysis is ongoing. “We just analyzed symptoms and lipid profiles so far,” Dr. Pedro said. In the future, they plan to publish additional findings for these postmenopausal women regarding any changes in quality of life, vaginal pH, vaginal cytology, or bladder symptoms.

The study was funded by the São Paulo (Brazil) Foundation for the Support of Research.

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