

Hormone Allergy May Cause Symptoms at Menses

BY JOHN R. BELL
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Progesterone and estrogen may provoke allergic antibody reactions in some women, which might in turn help explain various menstrual disorders, according to a prospective study.

Dr. Russell R. Roby and colleagues from the Roby Institute in Austin, Tex., found increased reactions to both hormones in patients with menstruation-related symp-

toms compared with control women (*Am. J. Reprod. Immunol.* 2006;55:307-13).

"Our data presented in this paper are the first to show the presence of IgM and IgE against different steroid hormones," they reported.

The investigators noted that acne, asthma, epilepsy, allergic rhinitis, and other disorders have been linked with menstrual cycle influences.

Their report "suggests the possibility of hormone allergy," they wrote, citing ear-

lier investigations linking hormone reactions to endocrine disorders and periodic rashes.

The researchers sampled the blood of 270 patients from their clinic who reported a change in their menstrual symptoms over the course of 2 years and tested for IgM and IgG antibodies to progesterone.

They also obtained blood samples from 288 unaffected women to serve as a control group.

When blood was tested via enzyme-linked immunosorbent assay, the test patients had a mean optical density (a measure of antibody levels) of 0.17 for IgG and 0.32 for IgM.

In the control population, the mean optical density was 0.08 for IgG and 0.13 for IgM—a statistically significant difference in both cases.

The investigators also tested another group of 98 patients for IgE antibodies against both progesterone and estrogen,

Supplement Raises Venous Thrombosis Risk

Conjugated equine estrogen raises the risk of venous thrombosis in postmenopausal women who have undergone hysterectomy, particularly within the first 2 years of starting the therapy, according to Dr. J. David Curb and his associates in the Women's Health Initiative study.

The portion of the WHI trial that was designed to determine the incidence of cardiovascular events associated with conjugated equine estrogen (CEE) therapy was terminated early because interim analysis showed that risks, particularly stroke risk, outweighed benefit. The final adjudicated data on venous thrombosis from this portion of the WHI trial has now been reported by Dr. Curb, of the University of Hawaii and the Pacific Health Research Institute, Honolulu, and his WHI associates.

In this portion of the WHI trial, 10,739 women aged 50-79 years who had undergone hysterectomy were randomly assigned to receive either 0.625 mg of CEE (Premarin) or placebo. They were followed every 6 months for a mean of 7 years.

During that time, venous thromboembolism occurred in 111 women (0.30% per year) in the CEE group and 86 women (0.22% per year) in the placebo group, with a hazard ratio (HR) of 1.32.

Deep vein thrombosis occurred in 85 women (0.23% per year) in the CEE group and 59 women (0.15% per year); the HR was 1.47. Pulmonary embolism was reported in 52 women (0.14% per year) in the CEE group and 39 women (0.10% per year) in the placebo group, for an HR of 1.37. The increased risk was highest during the first 2 years of estrogen therapy (*Arch. Intern. Med.* 2006;166:772-80).

"Our data suggest that although the absolute incidence is relatively low, the use of CEE increases the relative risk of venous thrombosis in postmenopausal women without a uterus. Women with appropriate indications, such as short-term treatment of severe menopausal symptoms, should use CEE only after careful consideration of the relative risks and benefits, especially if the women have other risk factors for venous thrombosis, including previous venous thrombosis, older age, obesity, and perhaps factor V Leiden," the researchers said.

—Mary Ann Moon

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CB₁ receptor

Decreased neurotransmitter release

Endocannabinoid

Ca²⁺

POSTSYNAPTIC

UNDERSTANDING THE ROLE OF THE ENDOCANNABINOID SYSTEM (ECS) IN CARDIOMETABOLIC RISK

An endocannabinoid binds to a CB₁ receptor, triggering a cascade of events.