Editorials

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Vet for fat—epicardial versus paracardial types and atherosclerosis risk
Amos Pines, MD

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Clear vision in postmenopausal women: role of hormone therapy and diabetes
Juan Ding, OD, PhD

Original Studies

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Heart fat and carotid artery atherosclerosis progression in recently menopausal women: impact of menopausal hormone therapy: The KEEPS trial
Samar R. El Khoudary, PhD, MPH, Vidya Venugopal, PhD, JoAnn E. Manson, MD, Maria M. Brooks, PhD, Nanette Santoro, MD, Dennis M. Black, PhD, Mitchell Harman, MD, Frederick Naftolin, MD, DPhil, Howard N. Hodis, MD, Eliot A. Brinton, MD, Virginia M. Miller, PhD, Hugh S. Taylor, MD, and Matthew J. Budoff, MD

The use of hormone therapy in recently menopausal women modifies the associations between paracardial fat and carotid intima media thickness (CIMT). Results suggests that oral conjugated equine estrogens may slow down the adverse impacts of heart fat accumulation outside the pericardial sac on CIMT as compared to 17β-estradiol.

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Interaction between postmenopausal hormone therapy and diabetes on cataract
Christy Costanian, PhD, Marie-Josée Aubin, MD, MSc, Ralf Buhrmann, PhD, and Ellen E. Freeman, PhD

This study investigated whether postmenopausal hormone therapy (HT) use interacts with diabetes, a risk factor for several age-related eye diseases. It was found that long-term HT use and type 2 diabetes interact in their relationship with cataract such that the odds of cataract is highest in that group.

(continued)
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Hot flashes are associated with altered brain function during a memory task
Pauline M. Maki, PhD, Minjie Wu, PhD, Leah H. Rubin, PhD, Deanne Fornelli, PA,
Lauren L. Drogos, PhD, Stacie Geller, PhD, Lee P. Shulman, MD, Suzanne Banuvar, MHSA,
Deborah M. Little, PhD, and Rhoda J. Conant, MD
Preliminary data suggest that vasomotor symptoms may contribute to memory performance
through effects on the hippocampus and prefrontal cortex. Larger studies are warranted to
determine the robustness of these initial observations.

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Trajectory analysis of sleep maintenance problems in midlife women before and after
surgical menopause: the Study of Women’s Health Across the Nation (SWAN)
Howard M. Kravitz, DO, MPH, Karen A. Matthews, PhD, Hadine Joffè, MD, MSc,
Joyce T. Bromberger, PhD, Martica H. Hall, PhD, Kristine Ruppert, Dr.PH, and
Imke Janssen, PhD
Sleep maintenance problems were relatively stable across time post-surgery. These data are
remarkably consistent with trajectory results across the natural menopause, suggesting
that pre-surgical assessment of sleep concerns could help guide women’s expectations
post-surgically.

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“I want to feel like I used to feel”: a qualitative study of causes of low libido in
postmenopausal women
Holly N. Thomas, MD, MS, Megan Hamm, PhD, Rachel Hess, MD, MS,
Sonya Borrero, MD, MS, and Rebecca C. Thurston, PhD
Postmenopausal women reported a number of different factors contribute to low libido,
including postmenopausal vaginal symptoms, erectile dysfunction in male partners, fatigue and
bodily pain, life stressors, and body image concerns. Women often found ways to adapt to these
factors, but adaptations require open communication between partners regarding sex, and some
women noted these conversations were difficult or not successful.

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Effects of menopause on sleep quality and sleep disorders: Canadian Longitudinal Study
on Aging
Sheida Zolfaghari, MD, Chun Yao, MSc, Cynthia Thompson, PhD, Nadia Gosselin, PhD,
Alex Desautels, MD, PhD, Thien Thanh Dang-Vu, MD, PhD, Ronald B. Postuma, MD, MSc, and
Julie Carrier, PhD
Menopause is associated with increased sleep-onset insomnia. Postmenopausal women also
are more likely to screen positive for obstructive sleep apnea. However, menopausal status is
not associated with sleep-maintenance, somnolence, or restless leg syndrome, and rapid eye
movement sleep behavior disorder.

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Menopausal hormone therapy, blood thrombogenicity, and development of white matter
hyperintensities in women of the Kronos Early Estrogen Prevention Study
Muthuvel Jayachandran, PhD, Brian D. Lahr, MS, Kent R. Bailey, PhD, Virginia M. Miller, PhD,
and Kejal Kantarci, MD
In recently menopausal women, the type of menopausal hormone therapy did not significantly
influence the association of markers of blood thrombogenicity with development of white matter
hyperintensities in the brain.
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Menopause and risk of hip fracture in middle-aged Chinese women: a 10-year follow-up of China Kadoorie Biobank
Ke Peng, MPH, Pang Yao, PhD, Christiana Kartsonaki, DPhil, Ling Yang, PhD, Derrick Bennett, PhD, Maoyi Tian, PhD, Liming Li, Yu Guo, MSc, Zheng Bian, PhD, Yiping Chen, DPhil, Zhengming Chen, DPhil, Rebecca Ivers, PhD, Mark Woodward, PhD, Robert Clarke, MD, on behalf of the China Kadoorie Biobank Collaborative Group
In a study of 125,336 postmenopausal women who had a natural menopause, 1,327 incident cases of hip fracture were recorded during the first 10 years of follow-up. The study demonstrated that women with younger age at menopause, longer interval since menopause or shorter duration of total reproductive years had the highest risks of hip fracture.

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Plasma levels of miR-30d-5p are decreased in regularly exercising postmenopausal women
Tilen Kranjc, PhD, Marko Milojević, MSc, Tomaz Kocjan, MD, Mojca Jensterle, MD, Janja Marc, PhD, and Barbara Ostanek, PhD
Plasma levels of hsa-miR-30d-5p were significantly lower in postmenopausal women with higher physical activity. Higher plasma levels of hsa-miR-21-5p and hsa-miR-93-5p were observed in the group with reduced sit-to-stand performance.

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The effect of metformin on vertebral marrow fat in postmenopausal women with newly diagnosed type 2 diabetes mellitus
Fang Lin, MS, Yuning Pan, MS, Yinwei Zhang, MS, and Qiang Zhou, BS
Postmenopausal women with newly diagnosed type 2 diabetes mellitus (T2DM) have a higher marrow fat content compared to nondiabetic women. Metformin treatment reduced marrow adiposity in T2DM.

333
Design and psychometric analysis of a climacteric adjustment questionnaire for middle-aged women
Mitra Reyhani, PhD, Ashraf Kazemi, PhD, Ziba Farajzadegan, PhD, and Mahrokh Keshvari, PhD
The findings of the present study indicated that the validity and reliability of the questionnaire designed to measure adjustment to the climacteric period in middle-aged women could be used in related studies.

Review Articles

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Safety of vaginal estrogens: a systematic review
Carolyn J. Crandall, MD, MS, FACP, Allison Diamant, MD, MSHS, and Nanette Santoro, MD
In this systematic review of clinical trials, newer low-dose estradiol rings, tablets, and inserts appear to induce the least increases in serum hormone levels, possibly indicating greater safety. Limited evidence in trials lasting up to 52 weeks suggest endometrial safety of vaginal estrogen use, but long-term trials are needed.
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**Systemic estradiol levels with low-dose vaginal estrogens**
Richard J. Santen, MD, Sebastian Mirkin, MD, Brian Bernick, MD, and Ginger D. Constantine, MD

Low-dose vaginal estrogen, used to treat moderate to severe postmenopausal dyspareunia and vulvar and vaginal atrophy, results in variable amounts of systemic absorption of estradiol, which are based on the product, dose, formulation, and/or placement in the vagina. Accurate measurement of the systemic levels of estradiol in postmenopausal women requires a detection assay with high sensitivity and specificity.

**Clinical Corner**

**NAMS Practice Pearl**

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**Taking a fresh look at mood, hormones, and menopause**
Claudio N. Soares, MD, PhD, FRCP, MBA

Midlife depression is influenced by both menopause- and nonmenopause-related factors. Clinicians should consider all available options to best determine individualized treatments for symptomatic midlife women. The prophylactic use of hormone therapy against depressive symptoms during the menopause transition is promising, but its broader adoption will depend on further studies and larger trials to confirm the efficacy and safety of such an approach.

**Letter to the Editor**

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