



# Menopause

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Janet S. Carpenter, PhD, RN, FAAN

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#### **Hormone therapy and sarcopenia: implications for the prevention of frailty as women age**

Andrew M. Kaunitz, MD, FACOG, NCMP, JoAnn V. Pinkerton, MD, FACOG, NCMP, and JoAnn E. Manson, MD, DrPH, FACP, NCMP

### Original Studies

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**OPEN**

#### **Effects of NT-814, a dual neurokinin 1 and 3 receptor antagonist, on vasomotor symptoms in postmenopausal women: a placebo-controlled, randomized trial**

Mike Trower, PhD, Richard A. Anderson, MD, PhD, Elizabeth Ballantyne, BSc, Hadine Joffe, MD, MSc, Mary Kerr, PhD, and Steve Pawsey, MB, FFPM

*Once-daily NT-814 ( $\geq 150$  mg/day) resulted in a rapid, marked improvement in hot flashes and waking due to night sweats. No safety concerns were identified. Doses up to 300 mg were well tolerated.*

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**OPEN**

#### **The association between hormone therapy and sarcopenia in postmenopausal women: the Korea National Health and Nutrition Examination Survey, 2008-2011**

Sung-Woo Kim, MD, and Rebecca Kim, MD

*The present study showed that prolonged use of hormone therapy was associated with higher muscle mass and lower prevalence of sarcopenia in postmenopausal women. These associations were significant in groups of postmenopausal women aged <65 years and those with BMI <25 kg/m<sup>2</sup>.*

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**Association of hot flushes with ghrelin and adipokines in early versus late postmenopausal women**

Roksana Karim, PhD, MBBS, Ha M. Dang, PhD, Howard N. Hodis, MD, Frank Z. Stanczyk, PhD, Roberta D. Brinton, PhD, and Wendy J. Mack, PhD

*Higher concentrations of ghrelin were associated with greater likelihood of hot flush in both early- and late-postmenopausal women. Leptin, adiponectin, and resistin levels were not associated with hot flush in postmenopausal women.*

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**Interferential current: a new option for the treatment of sexual complaints in women with premature ovarian insufficiency using systemic hormone therapy: a randomized clinical trial**

Cristina L. Benetti-Pinto, PhD, MD, Helena P. Giraldo, PhD, MD, Andrea E. Giraldo, MS-VI, Ticiana A. Mira, FT, and Daniela A. Yela, PhD, MD

*The use of perineal interferential current appears to be a new option for women with premature ovarian insufficiency using systemic hormone therapy and presenting with sexual complaints, leading to an improvement in pain, lubrication, satisfaction and orgasm.*

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**Efficacy and safety of ultra-low dose 0.005% estriol vaginal gel for the treatment of vulvovaginal atrophy in postmenopausal women with early breast cancer treated with nonsteroidal aromatase inhibitors: a phase II, randomized, double-blind, placebo-controlled trial**

Angelica Lindén Hirschberg, MD, PhD, Pedro Sánchez-Rovira, MD, PhD, Jesús Presa-Lorite, MD, Miriam Campos-Delgado, MD, Miguel Gil-Gil, MD, Elisabet Lidbrink, MD, PhD, Javier Suárez-Almaraz, Pharm, BSND, and Concepción Nieto-Magro, MD, PhD

*Ultra-low dose estriol vaginal gel showed efficacy in improving the symptoms and signs of vulvovaginal atrophy.*

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**Changes in hot flash experiences and related factors in women with breast cancer**

Chia-Ying Li, RN, MS, Yung-Chang Lin, MD, Tsui-Yun Yang, RN, PhD, Shin-Cheh Chen, MD, Hsien-Kun Chang, MD, Wen-Chi Shen, MD, and Mei-Ling Chen, RN, PhD

*This study reveals the change patterns of hot flash (HF) frequency and interference in women newly diagnosed with breast cancer who were still menstruating at study enrollment. The level of HF frequency and interference tended to increase as body mass index increased while anxiety and loss of sexual desire were associated with higher HF interference.*

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**Association between hysterectomy and depression: a longitudinal follow-up study using a national sample cohort**

Hyo Geun Choi, MD, PhD, Chae Chun Rhim, MD, PhD, Ji Young Yoon, MD, and Suk Woo Lee, MD, PhD

*The incidence of depression was higher in women who underwent hysterectomy than in the matched control group. This study suggests that immediate postoperative psychological and endocrinological monitoring and emotional support are needed for women who undergo hysterectomy.*

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Accelerated progression of waist-to-hip ratio but not body mass index associated with lower socioeconomic position: a cohort study of nonobese early postmenopausal Chinese women  
Gary K.K. Chung, MPH, Ruby H.Y. Yu, PhD, Jean Woo, MD, Francisco T.T. Lai, PhD, Roger Y. Chung, PhD, Eng-Kiong Yeoh, MBBS, and Suzanne C. Ho, PhD  
*Socioeconomic patterning was observed for the progression of waist-to-hip-ratio among non-obese Chinese women soon after menopause. Early postmenopausal stage may be a critical window for prevention of abdominal obesity among women with a lower educational attainment.*

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**Differences between accelerometer cut point methods among midlife women with cardiovascular risk markers**

Danielle Arigo, PhD, Jacqueline A. Mogle, PhD, Megan M. Brown, BS, Savannah R. Roberts, BS, Kristen Pasko, BS, Meghan L. Butryn, PhD, and Danielle Symons Downs, PhD  
*This two-phase study examined differences between four methods for estimating physical activity engagement from accelerometer devices, among midlife women with elevated cardiovascular risk. Multilevel models showed meaningful differences between methods, demonstrating the need for careful consideration of activity quantification in this at-risk population.*

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**Dietary inflammatory index and dietary energy density are associated with menopausal symptoms in postmenopausal women: a cross-sectional study**

Zahra Aslani, MSc, Maryam Abshirini, MSc, Motahar Heidari-Beni, PhD, Fereydoun Siassi, PhD, Mostafa Qorbani, PhD, Nitin Shivappa, PhD, James R. Hébert, ScD, Mahshid Soleymani, MSc, and Gity Sotoudeh, PhD  
*A pro-inflammatory diet was associated with higher menopause-specific somatic symptoms and higher dietary energy density was positively associated with menopausal symptoms.*

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**Adiposity and insulin resistance as mediators between age at menarche and type 2 diabetes mellitus**

Dechen Liu, MD, Yang Zhao, MD, Yu Liu, MD, PhD, Xizhuo Sun, MD, PhD, Honghui Li, MD, Zhaoxia Yin, MD, Linlin Li, MD, PhD, Bingyuan Wang, PhD, Yongcheng Ren, MD, Cheng Cheng, MD, Leilei Liu, MD, Xu Chen, MD, Feiyan Liu, MD, Qionggui Zhou, MD, Gang Tian, MD, Quanman Li, MD, Chunmei Guo, MD, Xiaoyan Wu, MD, Minghui Han, MD, Ranran Qie, MD, Shengbing Huang, MD, Ming Zhang, MD, PhD, Dongsheng Hu, MD, PhD, and Jie Lu, MD, PhD  
*The results of this population-based cross-sectional study demonstrate that women with late menarche may decrease the risk of type 2 diabetes mellitus (T2DM) in adulthood. The association between menarche and T2DM may be completely mediated by both adiposity and insulin resistance.*

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**Does vitamin D status influence lumbar disc degeneration and low back pain in postmenopausal women? A retrospective single-center study**

Hao-Wei Xu, MD, Yu-Yang Yi, MD, Shu-Bao Zhang, MD, Tao Hu, MD, PhD, Shan-Jin Wang, MD, PhD, Wei-Dong Zhao, MD, and De-Sheng Wu, MD, PhD  
*This study showed a high prevalence of hypovitaminosis D in postmenopausal women, serum concentrations of vitamin D <10ng/ml should be considered an indicator for severe disc degeneration and low back pain. Large-scale clinical trials are warranted to investigate clinical efficacy of vitamin D therapy in prevention and treatment of disc degeneration and low back pain.*

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**Higher intakes of fruits and vegetables are related to fewer menopausal symptoms: a cross-sectional study**

Maryam Safabakhsh, MSPH, Fereydown Siassi, PhD, Fariba Koohdani, PhD, Mostafa Qorbani, PhD, Shahla Khosravi, PhD, Maryam Abshirini, MSPH, Zahra Aslani, MSPH, Farahnaz Khajehnasiri, PhD, and Gity Sotoudeh, PhD

*The results of the present study showed that some fruit and vegetable (FV) subgroups had inverse associations with climacteric symptoms, while higher intake of some subgroups of FV appeared to be associated with more urogenital symptoms in postmenopausal women.*

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**Clinical Corner**

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**NAMS Practice Pearl**

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**Aspirin for primary prevention of cardiovascular disease in women**

Chrisandra L. Shufelt, MD, MS, NCMP, and JoAnn E. Manson, MD, DrPH, NCMP

*Aspirin use for primary prevention of cardiovascular disease (CVD) in women has become increasingly controversial. Three recent clinical trials and one updated meta-analysis fill several knowledge gaps. Taken together, the trials found minimal CVD benefit, offset by excess bleeding events in low- or moderate-risk participants, those with type 2 diabetes, and older adults aged 70 years and older.*

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**Letters to the Editor**

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