



# Menopause

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Early life exposure to famine and reproductive aging among Chinese women

Nengying Wang, MD, Yinqiong Huang, MD, Junping Wen, MD, Qing Su, MD, Yanling Huang, MD, Liangchun Cai, MD, Wei Lin, MD, Liyao Zong, MD, Huibin Huang, MD, Xiaofang Qian, MD, Fengye Zhu, MD, Han Sun, MD, Jin Yao, MD, Kaka Tang, MD, Ling Chen, MD, Jixing Liang, MD, Liantao Li, MD, Lixiang Lin, MD, Jieli Lu, MD, Yufang Bi, MD, Weiqing Wang, MD, Yan Zheng, MD, PhD, and Gang Chen, MD

This study focused on the influence of fetal exposure to famine on reproductive function during adulthood. Fetal exposure to famine might increase the risk of early menopause and premature ovarian failure.

(continued)

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**POSTMASTER:** Send address changes to *Menopause: The Journal of The North American Menopause Society*, P.O. Box 1610, Hagerstown, MD 21740.







#### 469

Gastric responses to acute psychological stress in climacteric women: a pilot study
María Raquel Huerta-Franco, MD, PhD, Miguel Vargas-Luna, PhD, Ximena Somoza, MD, MPH,
Isabel Delgadillo-Holtfort, PhD, Marco Balleza-Ordaz, PhD, and Svetlana Kashina, MS
Premenopausal and postmenopausal women had significantly decreased gastric motility (GM)
during stress tests; however, perimenopausal (PERIM) women did not exhibit GM changes
during the stress tests. The changes in sex hormones during PERIM may affect GM and stress
response gastric motility.

#### 476

# Self-awareness and the evaluation of hot flash severity: observations from the Seattle Midlife Women's Health Study

Lisa Jean Taylor-Swanson, PhD, MAcOM, Kenneth Pike, PhD, Ellen Sullivan Mitchell, PhD, Jerald R. Herting, PhD, and Nancy Fugate Woods, PhD, RN, FAAN Balanced self-awareness was associated with increased levels of hot flash severity. This suggests that women who are more self-aware of their body may perceive hot flash sensations as more severe.



#### 485

# The burden of vulvovaginal atrophy on women's daily living: implications on quality of life from a face-to-face real-life survey

Rossella E. Nappi, MD, PhD, Santiago Palacios, MD, PhD, Nico Bruyniks, MD, MRCOG, MFSRH, Martire Particco, MD, Nick Panay, BSc, FRCOG, MFSRH, on behalf of the EVES Study investigators

Severe symptoms of vulvovaginal atrophy are associated with worse quality of life in postmenopausal women.

### 492

# Factors related to age at menopause among Korean women: the Korean Longitudinal Survey of Women and Families

Young-taek Kim, PhD, Chiyoung Cha, PhD, RN, and Mi-ran Lee, MS, RN Various factors influenced menopause including sociodemographics, health status, and health behaviors. Specific tailored interventions for the management of depressive symptoms and smoking cessation could be developed to target modifying variables for Korean women in preparation for menopause.



#### 499

Secular trends and associated factors of age at natural menopause in Taiwanese women Te-Yi Shen, MS, Hsin-Jen Chen, PhD, Wen-Harn Pan, PhD, and Tsung Yu, PhD Using data from three cross-sectional phases of the Nutrition and Health Survey in Taiwan, we explored the secular trends and factors associated with age at natural menopause in Taiwanese women. This study found that women in the younger cohorts, with higher educational levels and who are parous and married may have later age at natural menopause.









#### 506

# Oral 17β-estradiol/progesterone (TX-001HR) and quality of life in postmenopausal women with vasomotor symptoms

James A. Simon, MD, Andrew M. Kaunitz, MD, Robin Kroll, MD, Shelli Graham, PhD, Brian Bernick, MD, and Sebastian Mirkin, MD

TX-001HR, an investigational oral formulation containing estradiol and progesterone, improved moderate to severe vasomotor symptoms and measures of quality of life in menopausal women who participated in the REPLENISH study. TX-001HR, may be a new option, if approved, for the treatment of moderate to severe vasomotor symptoms in menopausal women with a uterus.

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# Evaluation of clinical meaningfulness of estrogen plus progesterone oral capsule (TX-001HR) on moderate to severe vasomotor symptoms

Ginger D. Constantine, MD, Dennis A. Revicki, MD, Risa Kagan, MD, James A. Simon, MD, Shelli Graham, PhD, Brian Bernick, MD, and Sebastian Mirkin, MD Estrogen plus progesterone oral capsule (TX-001HR) provided clinically meaningful improvements in menopausal vasomotor symptom frequency.

#### 520

# The effect of a midwife-based counseling education program on sexual function in postmenopausal women: a randomized controlled clinical trial

Ehtram Naeij, MSc, Soghra Khani, PhD, Armin Firouzi, MSc, Mahmood Moosazadeh, PhD, and Farnaz Mohammadzadeh, MSc

This study showed that an educational program based on the midwife counselor method can be an appropriate approach to improving sexual function among postmenopausal women.

# 531

# Follicle-stimulating hormone, but not cardiorespiratory fitness, is associated with flow-mediated dilation with advancing menopausal stage

Corinna Serviente, PhD, and Sarah Witkowski, PhD

These data show that endothelial function declines with menopause, even in highly-fit, habitually active women and that high fitness is not associated with better function in perimenopausal or postmenopausal women. This study further demonstrates that follicle-stimulating hormone, which is elevated with menopause, is negatively related to flow-mediated dilation (FMD), whereas estradiol, which is reduced with menopause, is not related to FMD.

# Follicle-stimulating hormone is associated with lipids in postmenopausal women

Corinna Serviente, PhD, Tomi-Pekka Tuomainen, MD, PhD, Jyrki Virtanen, PhD, Sarah Witkowski, PhD, Leo Niskanen, MD, and Elizabeth Bertone-Johnson, ScD This population-based study found that follicle-stimulating hormone levels were associated with lipid levels in postmenopausal women not using hormone therapy. Specifically, higher follicle-stimulating hormone levels were associated with abnormal levels of total cholesterol and low-density lipoprotein cholesterol, with associations persisting after adjustment for adiposity and other cardiovascular disease risk factors.





### 546

# The relationship between serum fibroblast growth factor 23, Klotho, and lumbar spine bone mineral density in northern Chinese postmenopausal women

Wen Han, PhD, Xiao-juan Bai, MD, Lu-lu Han, PhD, Xue-feng Sun, PhD, and Xiang-mei Chen, PhD

Klotho was positively correlated with lumbar spine bone mass (LBMD), and there was a linear relationship between Klotho serum protein levels and LBMD; however, the levels of serum Klotho were not independently associated with reduced LBMD in northern Chinese postmenopausal women.

## **Clinical Corner**

### **NAMS Practice Pearl**

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### Adnexal tumors in menopausal women: surgery or surveillance?

Brian T. Burgess, DO, PhD, and Frederick R. Ueland, MD

The discovery of an ovarian tumor in a menopausal woman can be anxiety provoking for the woman and a diagnostic challenge for the healthcare provider. Experts recommend an initial evaluation with transvaginal ultrasound to help characterize the tumor's malignant risk. Management strategies will vary depending on whether the tumor is malignant or benign.

#### **Review Article**



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# The experiences and needs of Asian women experiencing menopausal symptoms: a meta-synthesis

Shefaly Shorey, PhD, RN, RM, and Esperanza D. Ng, BA

Asian women generally had positive to neutral attitudes toward menopause, and they used varied strategies to manage menopausal symptoms. Most expressed the need for more family support and informational support during the perimenopausal period.

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