Editorials
1107
Cross-cultural studies of menopause: the challenge continues
Robin J. Bell, MB, BS (Hons), PhD, MPH, FAFPHM

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Menopausal medicine: how to educate the next generation of menopause clinicians
Xuezhi Jiang, MD, FACOG, and Peter F. Schnatz, DO, FACOG, FACP, NCMP

Original Study
1111
Cross-cultural analysis of determinants of hot flashes and night sweats: Latin-American immigrants to Madrid and their Spanish neighbors
Irene Pérez-Alcalá, MA, Lynnette Leidy Sievert, PhD,
Carla Makhlouf Obermeyer, DSc, and David Sven Reher, PhD
Latin-American women who emigrated to Spain were less likely to report hot flashes compared with Spanish women.

1120
Menopause education: needs assessment of American obstetrics and gynecology residents
Mindy S. Christianson, MD, Jennifer A. Ducie, MD, Kristiina Altman, MD, PhD, Ayatallah M. Khafagy, MB, BCh, MPH, and Wen Shen, MD, MPH
A national survey of American obstetrics and gynecology residents was conducted. Results reveal that some residency programs are not fulfilling their residents’ educational goals in menopause medicine.
1126
Changes in bone mineral density are correlated with bone markers and reductions in hot flush severity in postmenopausal women treated with bazedoxifene/conjugated estrogens
John Christopher Gallagher, MD, Harry Shi, MS, Sebastian Mirkin, MD, and Arkadi A. Chines, MD
In a post hoc analysis of data from a 2-year study of postmenopausal women treated with a combination of bazedoxifene and conjugated estrogens, the increase in spine density was correlated with an early reduction in the hot flush score. Larger increases in lumbar spine and total hip density were significantly associated with higher bone markers at baseline.

1133
Does pattern recognition software using the Bahr monitor improve the sensitivity, specificity, and concordance of ambulatory skin conductance monitoring of hot flushes?
Evgenia Stefanopoulou, DClinPsych, and Myra Sally Hunter, PhD
In this study, improvements were found in concordance, sensitivity and specificity. When data were reanalyzed from a recent randomized controlled trial (MENOS2), this ambulatory measure was responsive to the effects of a cognitive behavioral intervention.

1139
Does accelerated reproductive aging underlie premenopausal risk for cardiovascular disease?
Maria E. Bleil, PhD, Steven E. Gregorich, PhD, Daniel McConnell, PhD, Mitchell P. Rosen, MD, and Marcelle I. Cedars, MD
Results from the current cross-sectional study suggest that having a greater ovarian reserve, indexed by higher levels of antimullerian hormone, is associated with having a healthier cardio-metabolic risk factor profile in a sample of healthy, regularly-cycling, premenopausal women.

1147
Vagal withdrawal during hot flashes occurring in undisturbed sleep
Massimiliano de Zambotti, PhD, Ian M. Colrain, PhD, Stephanie A. Sassoon, PhD, Christian L. Nicholas, PhD, John Trinder, PhD, and Fiona C. Baker, PhD
Cardiac autonomic vagal activity is reduced in association with hot flashes occurring during stable sleep in perimenopausal women.
Lifetime endogenous reproductive factors and severe depressive symptoms in postmenopausal women: findings from the E3N cohort
Florence Perquier, MSc, Joanne Ryan, PhD, Marie-Laure Ancelin, PhD, Sylvie Mesrine, MD, and Françoise Clavel-Chapelon, PhD
Among postmenopausal women of the E3N cohort study, some early endogenous reproductive factors as well as factors around the menopause were associated with depressive symptoms but associations varied according to the presence and the timing of the first psychological disorder.

Sternal skin conductance: a reasonable surrogate for hot flash measurement?
Deirdre R. Pachman, MD, Charles L. Loprinzi, MD, Paul J. Novotny, MS, Daniel V. Satele, BS, B reanna M. Linquist, RN, Sherry Wolf, RN, MS, and Debra L. Barton, RN, PhD
There continues to be a movement to identify and develop objective symptom measures to accompany patient self-reports. This brief research report describes one institution’s experience with evaluating a newly developed device to measure hot flashes using sternal skin conductance as a surrogate.

Percutaneous progesterone delivery via cream or gel application in postmenopausal women: a randomized cross-over study of progesterone levels in serum, whole blood, saliva, and capillary blood
Joanna Y. Du, MD, Puy Sanchez, MD, Lila Kim, BS, Colleen G. Azen, MS, David T. Zava, PhD, and Frank Z. Stanczyk, PhD
This study demonstrated very high levels of progesterone in capillary blood and saliva after topical application, despite low venous blood levels, which challenges previous assumptions and indicates substantial absorption and transport of progesterone to tissues.

Flaxseed reverses atherosclerotic lesion formation and lowers lipoprotein(a) in ovarian hormone deficiency
Sara C. Campbell, PhD, Neema Bakhshalian, DDS, PhD, Raz L. Sadaat, MS, Megan R. Lerner, MS, Stanley A. Lightfoot, MD, Daniel Brackett, PhD, and Bahram H. Arjmandi, PhD, RD
Flaxseed is a safe and efficacious functional food and the preliminary evidence provided in this study clearly showing regression of atherosclerotic lesion formation in Golden Syrian hamsters.
Zinc as a nutritional approach to bone loss prevention in an ovariectomized rat model
Payal Bhardwaj, MSc, Durg Vijay Rai, M Tech, PhD, and Mohan Lal Garg, PhD
This study provides information on the improvement of cortical bone micro architecture, various bone resorption and formation markers, bone antioxidant enzymes, and zinc retention in bone tissue after ovariectomy and zinc administration.

Relationship between serum osteocalcin levels and carotid intima-media thickness in Chinese postmenopausal women
Rong Yang, MD, Xiaojing Ma, MD, Jianxin Dou, MD, Feifei Wang, MD, Yuqi Luo, MD, Diancheng Li, MD, Jiaan Zhu, MD, PhD, Yuqian Bao, MD, and Weiping Jia, MD, PhD
This is the first study to provide evidence of the association between serum osteocalcin levels and subclinical atherosclerosis in Chinese postmenopausal women.

Menopause after a history of intrahepatic cholestasis of pregnancy
Kaisa Turunen, MD, Kristiina Helander, MA, Kari J. Mattila, MD, PhD, and Markku Sumanen, MD, PhD
In a controlled study, postmenopausal use of hormone therapy and disease history was explored. A previous history of intrahepatic cholestasis of pregnancy had no influence on the use of hormone therapy but was associated with some other health aspects.

Clinical Article

Hormone Therapy: A to Z
Catha Fischer, MD, Amanda N. Kallen, MD, and Lubna Pal, MBBS, MRCOG, MS

Patient Handout

What You Should Know About Hormone Therapy Health Risks and Benefits
Review Articles

1207
Controlled flax interventions for the improvement of menopausal symptoms and postmenopausal bone health: a systematic review
Tristan P. Dew, BSc, PhD, and Gary Williamson, BSc, PhD

Recent meta-analyses have reported benefits of oral phytoestrogens to bone health and blood cholesterol in postmenopausal women. This systematic review of controlled interventions addresses the efficacy of flax consumption in the treatment of climacteric symptoms, and effects on circulating sex hormones and bone health in peri/postmenopausal participants.

1216
Effects of walking on the preservation of bone mineral density in perimenopausal and postmenopausal women: a systematic review and meta-analysis
Di Ma, BS, Liping Wu, PhD, and Zhong He, PhD, RN

A meta-analysis of ten randomized and non-randomized controlled trials to evaluate the effects of walking on bone mineral density in perimenopausal and postmenopausal women.