Editorials

481
Anxiety and the menopausal transition: managing your expectations
Claudio N. Soares, MD, PhD, FRCPC

483
Effect of hormone therapy on breast epithelial cell proliferation
Frank Z. Stanczyk, PhD and Sharon A. Winer, MD, MPH

486
Progesterone receptor membrane component 1: is metabolism integral to its function and what other steroids are involved?
Thomas Price, MD

Original Articles

488
Does risk for anxiety increase during the menopausal transition? Study of Women’s Health Across the Nation
Joyce T. Bromberger, PhD, Howard M. Kravitz, DO, MPH, Yuefang Chang, PhD, John F. Randolph Jr, MD, Nancy E. Avis, PhD, Ellen B. Gold, PhD, and Karen A. Matthews, PhD

Women with high anxiety premenopausally may be chronically anxious and not at increased risk of high anxiety at specific stages of the menopausal transition. In contrast, women with low anxiety premenopausally may be more susceptible to high anxiety during and after the menopausal transition than before.

(continued)
Effects of short-term estradiol and norethindrone acetate treatment on the breasts of normal postmenopausal women
Guojun Cheng, MD, PhD, Ryan Butler, BSc, Margaret Warner, PhD, Jan-Ake Gustafsson, MD, PhD, Brigitte Wilczek, MD, PhD, and Britt-Marie Landgren, MD, PhD
A three-month prospective study shows that estradiol and estrogen plus progestogen treatment can up-regulate progesterone receptors but do not significantly affect estrogen receptors, androgen receptor, proliferation or breast density.

Overexpression of progesterone receptor membrane component 1: possible mechanism for increased breast cancer risk with norethisterone in hormone therapy
Hans Neubauer, PhD, Xiangyan Ruan, MD, Helen Schneck, Harald Seeger, PhD, Michael A. Cahill, PhD, Yayun Liang, PhD, Benfor Mafuvadze, PhD, Salman M. Hyder, PhD, Tanja Fehm, MD, and Alfred O. Mueck, MD, PharmD, PhD
Overexpression of progesterone receptor membrane component-1 might explain the increased risk observed under hormone therapy using norethisterone as the progestogenic component.

Cognition in perimenopause: the effect of transition stage
Miriam T. Weber, PhD, Leah H. Rubin, PhD, and Pauline M. Maki, PhD
In this cross-sectional study, women in the first year of postmenopause performed worse than women in the late reproductive and late menopausal transition stages on measures of verbal learning, verbal memory and motor function. Vasomotor, sleep and anxiety symptoms did not account for these differences.

Impact of the severity of vasomotor symptoms on health status, resource use, and productivity
Jennifer Whiteley, EdD, MSc, MA, Jan-Samuel Wagner, BS, Andrew Bushmakin, MS, Lewis Kopenhafer, BA, Marco DiBonaventura, PhD, and Jill Racketa, MS
In this study vasomotor symptoms are associated with reduced health related quality of life and significant healthcare resource utilization.
Association between habitual physical activity and lower cardiovascular risk in premenopausal, perimenopausal, and postmenopausal women: a population-based study
Verónica Colpani, PT, Karen Oppermann, MD, PhD, and Poli Mara Spritzer, MD, PhD
In this cross-sectional analysis nested in a population-based study, pedometer-determined habitual physical activity was associated with a decrease in cardiovascular risk and diabetes in middle-aged woman, independently of menopausal status.

Adaptation of the Utian Quality of Life Scale to Portuguese using a community sample of Portuguese women in premenopause, perimenopause, and postmenopause
Filipa Pimenta, PhD, Isabel Leal, PhD, João Maroco, PhD, Bruna Rosa, MSc, and Wulf H. Utian, MD, PhD, DSc
This research emphasizes that the Utian Quality of Life Scale has good psychometric properties in its Portuguese version and it can be a sound instrument to assess quality of life during the climacteric.

Differential effects of estradiol on carotid artery inflammation when administered early versus late after surgical menopause
Areepan Sophonsritsuk, MD, PhD, Susan E. Appt, DVM, Thomas B. Clarkson, DVM, Carol A. Shively, PhD, Mark A. Espeland, PhD, and Thomas C. Register, PhD
This study provides insights into mechanisms underlying diminished atheroprotective effects of estrogen when initiated after a long post-menopausal period, with implications for interpretation of the cardiovascular outcomes of the Women’s Health Initiative.

Serum osteocalcin levels in relation to metabolic syndrome in Chinese postmenopausal women
Rong Yang, MD, Xiaojing Ma, MD, Xiaoping Pan, BS, Feifei Wang, MD, Yuqi Luo, MD, Chengchen Gu, BS, Yuqian Bao, MD, and Weiping Jia, MD, PhD
This study is the first to show an inverse association between serum osteocalcin levels and metabolic syndrome in Chinese postmenopausal women.
Conjugated equine estrogens and estradiol benzoate differentially modulate the natriuretic peptide system in spontaneously hypertensive rats
Luciana Barbosa Firmes, PhD, Najara Oliveira Belo, PhD, and Adelina Martha Reis, PhD

Estradiol reduced blood pressure and increased synthesis of atrial natriuretic peptide in spontaneously hypertensive rats but conjugated equine estrogens had no effect.

Association between polymorphisms in renin-angiotensin system genes and primary ovarian insufficiency in Korean women
Yong Wook Jung, MD, Young Joo Jeon, MS, Hye Mi Park, MS, Bo Eun Lee, BS, HyungChul Rah, DVM, PhD, Woo Sik Lee, MD, PhD, Tae Ki Yoon, MD, PhD, and Nam Keun Kim, PhD

This study demonstrates a significant association between the angiotensin converting enzyme (ACE) and angiotensin II type 1 receptor (AT1R) gene polymorphisms and the prevalence of premature ovarian insufficiency in Korean women. Women with the ACE insertion (I) allele or AT1R 1166C allele exhibited an increased prevalence of premature ovarian insufficiency.

Bone mineral density in postmenopausal Mexican-Mestizo women with normal body mass index, overweight, or obesity
Juan Pablo Méndez, MSc, MD, David Rojano-Mejia, PhD, MD, Javier Pedraza, MD, Ramón Mauricio Coral-Vázquez, PhD, MSc, Ruth Soriano, MPH, Eduardo García-García, MD, María del Carmen Aguirre-García, MD, Agustín Coronel, VMD, MVZ, and Patricia Canto, MD, MsC, PhD

In postmenopausal women bone mineral density at the lumbar spine, total hip, and femoral neck increases significantly as body mass index increases.

Effects of watermelon supplementation on arterial stiffness and wave reflection amplitude in postmenopausal women
Arturo Figueroa, MD, PhD, Alexei Wong, MS, Shirin Hooshmand, PhD, and Marcos Angel Sanchez-Gonzalez, MD, PhD

Menopause is associated with increased arterial stiffness and hypertension. This study has shown that 6 weeks of watermelon supplementation decreases arterial stiffness and blood pressure in obese postmenopausal women with hypertension.
Role of hormones in cartilage and joint metabolism: understanding an unhealthy metabolic phenotype in osteoarthritis

Anne C. Bay-Jensen, MSc, PhD, Eline Slagboom, DMed, Pingping Chen-An, PhD, Peter Alexandersen, MD, Per Qvist, PhD, Claus Christiansen, DMed, Ingrid Meulenbelt, PhD, and Morten A. Karsdal, PhD

Estrogens are important regulators of tissue integrity and metabolism. It is speculated that metabolic dysregulation and estrogen deficiency may be key drivers in the development of joint degenerative diseases, such as osteoarthritis.

Letters to the Editor

587