Menopause
The Journal of The North American Menopause Society

VOLUME 23, ISSUE 7, 2016

CONTENTS

Editorials

701
Is exercise an effective therapy for menopause and hot flashes?
Rebekah A.I. Lucas, PhD

704
The response to ospemifene in normal human breast tissue cultures
James H. Pickar, MD

706
Menopausal symptoms in Bangladeshi women in midlife
Mary Ann Lumsden, MD, FRCOG

Original Articles

708
Exercise training reduces the frequency of menopausal hot flushes by improving thermoregulatory control
Tom G. Bailey, PhD, N. Timothy Cable, PhD, Nabil Aziz, MD, Rebecca Dobson, MD, Victoria S. Sprung, PhD, David A. Low, PhD, and Helen Jones, PhD
This study showed that improvement in fitness with exercise training can lead to clinically-relevant reductions in hot flushes that are associated with improved thermoregulatory and vascular control.

719
Effects of ospemifene, a novel selective estrogen-receptor modulator, on human breast tissue ex vivo
Natalija Eigeliene, MD, PhD, Lauri Kangas, PhD, Christina Hellmer, MS, Tommi Kauko, MS, Risto Erkkola, MD, PhD, and Pirkko Härkönen, MD, PhD
Ospemifene, a novel SERM accepted for treatment of dyspareunia caused by vaginal atrophy, inhibited proliferation and strongly opposed estradiol stimulation of normal breast tissue of postmenopausal women in ex vivo explant cultures. The effect was as efficacious but less potent than that of raloxifene or tamoxifen.

(continued)
731
Prevalence and severity of vasomotor symptoms and joint pain in women at midlife in Bangladesh: a population-based survey
Rakibul M. Islam, MPhil, MPH, Robin J. Bell, MBBS, PhD, Baki Billah, MSc, PhD, Mohammad B. Hossain, MSc, PhD, and Susan R. Davis, MBBS, FRACP, PhD
This nationally representative, population-based study of women at midlife in Bangladesh demonstrates that a high proportion of Bangladeshi women experience moderate-severely bothersome vasomotor symptoms and joint pain. Despite the high symptom prevalence, no women reported treatment, suggesting that menopause remains neglected in Bangladesh.

740
Effects of preoperative vaginal estrogen therapy for the incidence of mesh complication after pelvic organ prolapse surgery in postmenopausal women: is it helpful or a myth? A 1-year randomized controlled trial
Zhixing Sun, MD, Lan Zhu, MD, Tao Xu, PhD, Xinwen Shi, BD, and Jinghe Lang, MD
In postmenopausal women with severe pelvic organ prolapse who underwent pelvic reconstructive surgery with mesh, avoiding use of vaginal estrogen application was noninferior to preoperative vaginal estrogen therapy regarding mesh exposure rate within 1 year of follow up.

749
Profiling of plasma metabolites in postmenopausal women with metabolic syndrome
Miho Iida, MD, Sei Harada, MD, Ayako Kurihara, RD, MS, Kota Fukai, MD, Kazuyo Kuwabara, PhD, Daisuke Sugiyama, MD, PhD, Ayano Takeuchi, PhD, Tomonori Okamura, MD, PhD, Miki Akiyama, PhD, Yuji Nishiwaki, MD, PhD, Asako Suzuki, BS, Akiyoshi Hirayama, PhD, Masahiro Sugimoto, PhD, Tomoyoshi Soga, PhD, Masaru Tomita, PhD, Kouji Banno, MD, PhD, Daisuke Aoki, MD, PhD, and Toru Takebayashi, MD, MPH, PhD
Japanese postmenopausal women who develop metabolic syndrome may have elevated concentrations of multiple amino acids, including branched-chain amino acids, alanine, glutamate, lysine, proline, and other polar metabolites such as alpha-aminoadipate.

759
Metabolic syndrome as a predictor of endometrial polyps in postmenopausal women
Flavia Neves Bueloni-Dias, MD, Daniel Spadoto-Dias, MD, Lucia R.M.G. Delmanto, MD, Jorge Nahas-Neto, MD, and Eliana A.P. Nahas, MD, PhD
This study evaluated 132 postmenopausal women with endometrial polyps compared to 264 postmenopausal women without. Obesity, dyslipidemia, hyperglycemia and the presence of metabolic syndrome were found to be predictive factors for endometrial polyps.

765
Long-term outcomes of modified laparoscopic sacrocolpopexy for advanced pelvic organ prolapse: a 3-year prospective study
Shuo Liang, MD, Lan Zhu, MD, Xiaochen Song, MD, Tao Xu, MD, Zhijing Sun, MD, and Jinghe Lang, MD
Modified laparoscopic sacrocolpopexy appears to be a safe and effective procedure that achieves good long-term anatomical and functional results.

771
Efficacy and tolerability of bazedoxifene in Mexican women with osteoporosis: a subgroup analysis of a randomized phase 3 trial
Santiago Palacios, MD, PhD, Robert Williams, BSc, Sebastian Mirkin, MD, Kajjie Pan, MS, Lizbeth Arias, MD, MBA, and Barry S. Komm, PhD
In this subgroup analysis of a 3-year, phase 3 trial, bazedoxifene produced improvements in bone turnover markers and bone mineral density in Mexican women with osteoporosis, similar to those in the overall population. However, the bone mineral density changes were not significantly different compared with placebo in this smaller subgroup.
Estrogen therapy may counterbalance eutrophic remodeling of coronary arteries and increase bradykinin relaxation in a rat model of menopausal hypertension
Mate Matrai, MD, Judit R. Hetthéssy, MD, Gyorgy L. Nadas, MD, PhD, Bela Szekacs, MD, PhD, DMS, Metin Mericli, MD, Nandor Acs, MD, PhD, Emil Monos, MD, PhD, DMS, Nissim Arbib, MD, MHA, MPH, and Szabolcs Varbiro, MD, PhD
Estrogen may be considered to counterbalance some of the changes in the wall of intramural coronaries in the early stages of chronic hypertension.

A cross-cultural comparison of climacteric symptoms, self-esteem, and perceived social support between Mosuo women and Han Chinese women
Ying Zhang, MA, Xudong Zhao, MD, Rainer Leonhart, PhD, Maya Nadig, PhD, Annette Hasenburg, MD, Michael Wirsching, MD, and Kurt Fritzsche, MD
Climacteric symptoms in women have been shown to be influenced by different cultures. In this cross-cultural study Mosuo women, who come from a Chinese minority group with a matriarchal structure, reported milder symptoms as well as higher self-esteem and higher perceived support from family compared with Han Chinese women, who are from the majority ethnic group in China with a patriarchal structure.

Efficacy of vaginally applied estrogen, testosterone, or polyacrylic acid on vaginal atrophy: a randomized controlled trial
Tatiane Fernandes, MD, Lucia Helena Costa-Paiva, MD, PhD, Adriana Orcesi Pedro, MD, PhD, Luiz Francisco Cintra Baccaro, MD, PhD, and Aarão Mendes Pinto-Neto, MD, PhD
In this study there was a significant improvement in vaginal trophism in postmenopausal women with vaginal atrophy treated with testosterone and estrogen.

Menopausal women requesting egg/embryo donation: examining health screening guidelines for assisted reproductive technology
Taleen MacArthur, BA, Gloria Bachmann, MD, MMS, and Charletta Ayers, MD, MPH
The data from this review suggest the need for the development of standardized counseling and screening guidelines for optimal care of all older women seeking assisted reproductive technology to becoming a parent.

Cognition and the menopause transition
Pauline M. Maki, PhD, and Victor W. Henderson, MD, MS
Women who experience forgetfulness and concentration problems while transitioning through menopause often express concern over whether these problems are normal or represent a serious cognitive disorder. Helping women to understand that these complaints are normal in menopause can help to minimize their worry.
Review Article

806

Primary ovarian insufficiency associated with autosomal abnormalities: from chromosome to genome-wide and beyond
Patsama Vichinsartvichai, MD
Various genetic aberrations associated with primary ovarian insufficiency occur on autosomes. However, further investigations about gene functioning are needed.

Case Report

816

Pelvic floor muscles training to reduce symptoms and signs of vulvovaginal atrophy: a case study
Joanie Mercier, PT, MSc, Melanie Morin, PT, PhD, Marie-Claude Lemieux, MD, Barbara Reichtzer, MD, MSc, Samir Khalife, MD, and Chantale Dumoulin, PT, PhD
This case study describes a 77 year old woman with severe vulvo-vaginal atrophy and her symptoms' improvement following 12-weeks of pelvic floor muscle training.