Editorials

1001
Reassuring data regarding the use of hormone therapy at menopause and risk of breast cancer
JoAnn V. Pinkerton, MD, FACOG, NCMP, Carolyn S. Wilson, MD, FACOG, NCMP, and Andrew M. Kaunitz, MD, FACOG, NCMP

1005
Screening for factors at midlife associated with reduced longevity in women
Robin J. Bell, MB, BS (Hons), PhD, MPH, FAFPHM

Original Studies

1008
Health screening of middle-aged women: what factors impact longevity?
Juan E. Blümel, MD, PhD, Socrates Aedo, MD, Nigel Murray, MD, María S. Vallejo, MD, and Peter Chedraui, MD, PhD
A history of fracture appears in middle-aged women as a strong predictor of mortality, surpassing diabetes and arterial hypertension. Multiparity, on the other hand, was a protective factor.

1014
Changes in serum endogenous estrogen concentrations are mediators of the effect of low-dose oral estradiol on vasomotor symptoms
Kristine E. Ensrud, MD, MPH, Joseph C. Larson, MS, Katherine A. Guthrie, PhD, Carolyn J. Crandall, MD, MS, Andrea Z. LaCroix, PhD, Susan D. Reed, MD, MPH, MS, Shalender Bhasin, MB, BS, Caroline M. Mitchell, MD, MPH, and Hadine Joffe, MD, MSc
Treatment with low-dose (0.5 mg) oral 17 estradiol compared to placebo in peri-menopausal and postmenopausal women with vasomotor symptoms (VMS) results in 4 to 5-fold increases in serum E2 and E1 concentrations. The increases in E2 and E1 concentrations with low-dose oral estradiol treatment appear to mediate in part the effect of low-dose estradiol in reducing VMS frequency.

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1021
Associations of hypertensive disorders of pregnancy and gestational diabetes mellitus with menopausal symptoms at midlife in Project Viva
Diana C. Soria-Contreras, MSc, PhD, Wei Perng, MPH, PhD, Sheryl L. Rifas-Shiman, MPH, Lidia Mingeue-Alarcón, MPH, PhD, Marie-France Hivert, MD, MMSc, Jan Shifren, MD, NCMP, Emily Oken, MD, MPH, and Jorge E. Chavarro, MD, ScD
In this prospective study of midlife women, a history of hypertensive disorders of pregnancy or gestational diabetes was not associated with menopausal symptoms assessed by the Menopause Rating Scale.

1028
A survey of medical cannabis use during perimenopause and postmenopause
M. Kathryn Dahlgren, PhD, Celine El-Abboud, BA, Ashley M. Lambros, BS, Kelly A. Sagar, PhD, Rosemary T. Smith, BS, and Staci A. Gruber, PhD
This survey study assessed modes of cannabis use endorsed by peri- and postmenopausal individuals and specific menopause-related symptoms indicated for medical cannabis use. This information will help inform next steps for clinical trials designed to assess the efficacy of specific cannabinoid-based products.

1037
#Menopause: the menopause ontology project
Elissa Trieu, MD, Abigail P. Davenport, MD, Sheryl A. Kingsberg, PhD, and Cheryl B. Iglesia, MD
This study analyzed tweets using the hashtag #menopause to develop a hashtag ontology specific to menopause. Adoption of a hashtag ontology with standardized terminology by medical professionals may facilitate easier communication with peers and patients.

1040
Dynapenic-abdominal obesity as an independent risk factor for chronic kidney disease in postmenopausal women: a population-based cohort study
Youngju Choi, PhD, Jinkyung Cho, PhD, Jiyeon Kim, PhD, Jun Hyun Bae, PhD, Eun-Jeong Cho, MS, Eunwoo Chang, PhD, Kyung-Lim Joa, MD, PhD, Junghoon Kim, PhD, Dong-Ho Park, PhD, Ju-Hee Kang, MD, PhD, and Hyo-Bum Kwak, PhD
Dynapenic-abdominal obesity, as determined by low handgrip strength and high waist circumference values, was associated with increased risk of chronic kidney disease in postmenopausal women. The dynapenic-abdominal obese group displayed lower levels of an estimated glomerular filtration rate.

1047
Dietary patterns and prevalence of multimorbidity in women in southern Brazil
Jaqueline Sturmer, PhD, Débora Luiza Franken, PhD, Daiane Luisa Ternus, MS, Ruth Liane Henn, PhD, Juvenal Soares Dias-da-Costa, PhD, Maria Teresa Anselmo Olinto, PhD, and Vera Maria Vieira Paniz, PhD
This study aimed to investigate the association between dietary patterns and prevalence of multimorbidity in a representative sample of women. A robust association between the Brazilian dietary pattern and the prevalence of multimorbidity was found, with women with a stronger adherence to this pattern having a 40% lower probability of multimorbidity, regardless of age.
1055
Cross-cultural adaptation and psychometric evaluation of the Brazilian Portuguese version of the Vulvovaginal Symptoms Questionnaire
Michele Elisabete Rúbia Alem, PhD, Thais Cristina Chaves, PhD,
Vilena Barros de Figueiredo, PhD, Ana Carolina Sartorato Beleza, PhD,
Cristine Homsi Jorge Ferreira, PhD, Jordana Barbosa da Silva, MD, and Patricia Driusso, PhD
Vulvovaginal symptoms are common and challenging problems that can occur because of several factors, and the use of validated questionnaires is a way to evaluate both symptoms and their impact on quality of life. The VSQ-Br is a valid tool to assess vulvovaginal symptoms and can be used in the daily practice of healthcare professionals in Brazil.

1062
Evaluating the association between amino acid and acylcarnitine profiles and different levels of coronary artery disease risk in postmenopausal women using targeted metabolomics technique
Shaghayegh Hosseinkhani, MSc, Solaleh Esmaghholipour, PhD, Pooneh Salari, MD, PhD,
Kazem Khalagi, PhD, Shapour Shirani, MD, Niloufar Najjar, BSc, Bagher Larijani, MD,
Parvin Pasalar, PhD, and Farideh Razi, MD
Metabolomics, as a means for identifying biomarkers and evaluating the risk of developing cardiovascular disease, has been taken into consideration in recent years. The present study indicated that circulating levels of amino acids and acylcarnitine profiles in postmenopausal women are partly associated with the severity of coronary artery disease in these patients.

1071
Evaluation of the relationship between plasma viscosity and selected menopausal symptoms using the Menopause Rating Scale
Hilal Korkmaz, MD, Tufan Arslanca, MD, Esra Tekin, MD, Burak Kayabaşı, MD,
and Kazime Gonca Akbulut, MD, PhD
This study found that women with selected menopausal symptoms requiring treatment according to the Menopause Rating Scale (MRS) score (MRS > 14 points) had a significantly higher plasma viscosity than those who did not require treatment. The results revealed that the plasma viscosity level was higher in women with MRS > 14 and is related with the urogenital symptoms score. A significant correlation between the duration of menopause and plasma viscosity was also found.

1077
Risk factors for delayed intrauterine device removal among menopausal women in rural China
Zhanhong Zong, PhD, MPH, Xiaoming Sun, MD, and Norman Hearst, MD, MPH
Delayed intrauterine device (IUD) removal after menopause is a common problem affecting millions of women in rural China. Lack of knowledge about timing for IUD removal and structural barriers in health service organizations must be addressed to improve the situation.
Clinical Corner

NAMS Practice Pearl

1083
Clinical management of hypoactive sexual desire disorder in postmenopausal women
Sheryl A. Kingsberg, PhD, and Stephanie S. Faubion, MD, MBA, FACP, NCMP, IF
Midlife women’s healthcare professionals are uniquely positioned to easily and accurately
screen, diagnose, and treat hypoactive sexual desire disorder. Treatment options include
education, psychotherapy, or pharmacotherapy used alone or in combination. Healthcare
professionals should use shared decision-making when choosing among treatment options.

Review Articles

1086
Estrogen therapy and breast cancer in randomized clinical trials: a narrative review
Kathy Pan, MD, Sayeh Lavasani, MD, Aaron K. Aragaki, MS,
and Rowan T. Chlebowski, MD, PhD
Results from observational studies and the Women’s Health initiative (WHI) randomized trial
are discordant regarding estrogen therapy and breast cancer incidence. Consideration of
smaller randomized trials is consistent with the WHI finding that estrogen therapy reduces
breast cancer incidence.

1093
Gonadotropin-releasing hormone agonists for ovarian protection during breast cancer
chemotherapy: a systematic review and meta-analysis
Zhen-Yu Li, MD, Ying-Li Dong, M. Med, Xiao-Zhong Cao, M. Med, Sha-Sha Ren, M. Med,
and Zhen Zhang, M. Med
Administration of GnRHa concurrent with chemotherapy treatment of breast cancer in
premenopausal women improved the rate of resumption of ovarian function.

1101
Potential effects of virtual interventions for menopause management: a systematic review
Ping Zou, PhD, RN, Daniel D’Souza, BHSc, Yan Luo, PhD, RN, Winnie Sun, PhD, RN,
Hui Zhang, PhD(c), RN, and Yeqin Yang, PhD
Based on 16 included studies, this systematic review suggested that virtual interventions might
have potential to improve the physical and psychosocial health outcomes of menopausal women
although some conflicting findings existed. In addition, virtual interventions were feasible
in terms of being usable, cost-effective, and eliciting satisfaction and compliance among
menopausal women.