Editorials

969
Initial observations describing a lack of endometrial estrogenicity in response to low-dose estrogen vaginal implants
James K. Pru, PhD

971
A path to a healthier middle age in adolescents with early menarche: avoid teen pregnancy?
Raja Sayegh, MD, FACOG, FACS

NAMS Position Statement

973
Management of osteoporosis in postmenopausal women: the 2021 position statement of The North American Menopause Society
Advances in medications and knowledge about the pathophysiology and epidemiology of postmenopausal osteoporosis, as well as new perspectives about the role of hormone therapy in the management of skeletal health, longer experience with the efficacy and safety of older osteoporosis drugs, the potential role of drug holidays for bisphosphonates, and new paradigms regarding sequential use of anabolic and antiremodeling osteoporosis therapies, created the need to update the 2010 Position Statement from The North American Menopause Society on the management of osteoporosis in postmenopausal women.

Original Studies

998
Evaluation of endometrial progesterone receptor expression after 12 weeks of exposure to a low-dose vaginal estradiol insert
Sebastian Mirkin, MD, James A. Simon, MD, James H. Liu, MD, David F. Archer, MD, Patricia D. Castro, PhD, Shelli Graham, PhD, Brian Bernick, MD, and Barry Komm, PhD
Low-dose 4-µg and 10-µg estradiol vaginal inserts placed in the lower (outer) part of the vagina did not significantly increase the expression of the estrogen-sensitive progesterone receptor in the endometrium compared with placebo.

(continued)
1004
The role of multiparity and maternal age at first pregnancy in the association between early menarche and metabolic syndrome among middle-aged and older women
Tiago Novais Rocha, MSc, Pedro Rafael de Souza Macêdo, MSc, Afshin Vafaei, PhD, Dimitri Taurino Guedes, PhD, Ingrid Guerra Azevedo, PhD, Álvaro Campos Cavalcanti Maciel, PhD, and Saionara Maria Aires da Câmara, PhD
Age at first pregnancy may partially contribute to the association between early menarche and metabolic syndrome among middle-aged and older women who had experienced a pregnancy over their lifetime.

1012
Symptom experience during the late reproductive stage and the menopausal transition: observations from the Women Living Better survey
Nina Coslov, MBA, Marcie K. Richardson, MD, FACOG, and Nancy Fugate Woods, PhD, RN, FAAN
Many women experience symptoms similar to those reported during the menopausal transition before cycle irregularity of a week or more and most don’t expect these changes until age 50 or later. Anticipatory guidance for women, education for the clinicians who care for them, as well as ongoing research about the epidemiology and management of late reproductive stage symptoms warrant increased attention.

1026
Risk of de novo severe carpal tunnel syndrome after bilateral oophorectomy: a population-based cohort study
Julia Starlinger, MD, PhD, Verena J.M.M. Schrier, MD, PhD, Carin Y. Smith, BS, Joanne Song, BS, Elizabeth A. Stewart, MD, Liliana Gazzuola Rocca, MD, Peter C. Amadio, MD, and Walter A. Rocca, MD, MPH
The risk of severe carpal tunnel syndrome, common in perimenopausal women, is increased after bilateral oophorectomy. The association may be causal or due to confounding; therefore, the precise biological mechanisms explaining the association and the absence of a mitigating effect of estrogen therapy should be further investigated.

1037
Differences in menopausal symptoms and female sexual function by region and ethnicity in West Texas and Central Arizona: a cross-sectional survey
Beth A. Prairie, MD, MPH, Juliana M. Kling, MD, MPH, Matthew R. Buras, MS, Richard J. Butterfield, MA, and Marjorie Jenkins, MD
In a group of menopausal women from the Southwest, most reported symptoms consistent with female sexual dysfunction, and the degree of sexual problems appeared to be greater in the Hispanic participants from Texas.

1044
Effects of oral versus transdermal estradiol plus micronized progesterone on thyroid hormones, hepatic proteins, lipids, and quality of life in menopausal women with hypothyroidism: a clinical trial
Juliana Kaminski, MD, Cleo Mesa Junior, PhD, Helena Pavesi, MD, Beatriz Drobrzenski, MD, and Gisah M. do Amaral, PhD
Total T4 and thyroxine-binding globulin levels increase after oral estradiol in women with hypothyroidism and it may cause clinical changes in serum thyrotropin levels. Conversely, transdermal estradiol alone or plus micronized progesterone does not cause major changes in thyroid function in these women.
1053
Is climacterium by the mid-40s associated with thyroid dysfunction or autoimmunity?
A population-based study
Susanna M. Savukoski, MD, Maarit J. Niinimäki, MD, Paula R.O. Pesonen, MSc,
Juha P. Auvinen, MD, Tuja Männistö, MD, Katri S. Puokka, PhD, Tapani Ebeling, MD, and
Eila T.J. Suvanto, MD
This study investigated the prevalence of thyroid peroxidase autoantibody positivity and thyroid
dysfunction in relation to climacteric status at 46 years of age. The study found that thyroid
medication use was more common in women with early onset of the climacteric phase, but the
prevalence of thyroid antibody positivity was not more common.

1060
Preparing women experiencing symptoms of menopause for shared decision making
about treatment
Sandra Dayaratna, MD, Randa Sifri, MD, Rebecca Jackson, MD, Rhea Powell, MD, MPH,
Katherine Sherif, MD, Melissa DiCarlo, MPH, MS, Sarah E. Hegarty, MPhil,
Anett Petrich, RN, MSN, Emily Lambert, MPH, Anna Quinn, MPH, RYT, and
Ronald Myers, DSW, PhD
This study determined that among women experiencing menopausal symptoms, a nurse led
decision support intervention increased knowledge about treatment alternatives, reduced
treatment decisional conflict, and clarified treatment preference.

Clinical Corner

NAMS Practice Pearl

1067
Statin therapy in midlife women
Chrisandra L. Shufelt, MD, MS, NCMP
Heart disease remains the leading cause of morbidity and mortality in US women. At the
time of menopause, several risk factors for atherosclerotic cardiovascular disease shift
independent of chronologic aging, including the lipoprotein profile. It is important that
menopause practitioners recognize this shift and assess which women may benefit from
statin therapy.
Review Article

1070
Preeclampsia and cancer risk in women in later life: a systematic review and meta-analysis of cohort studies
Fengxia Wang, RN, Wenyan Zhang, MD, Wenke Cheng, MD, Nana Huo, MD, and Shenfeng Zhang, MD

Women with preeclampsia have a decreased breast cancer (BC) risk and increased ovarian cancer risk compared with the normal population. A subgroup analysis stratified by reproductive factors demonstrated that BC risk decreased in the preeclampsia population in parous women, women with full-term pregnancies, and women with increasing parity regardless of their menopausal status and the sex of their offspring.