Editorials

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Late skeletal effects of early menopause
Michael R. McClung, MD

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Visceral fat accumulation: is it caused by estrogen deficiency?
Michelle P. Warren

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Differential effect of depression versus thermoregulation in postmenopausal
sleep disturbance
Barbara L. Parry, MD

Original Articles

1035
Effects of self-reported age at nonsurgical menopause on time to first fracture
and bone mineral density in the Women’s Health Initiative Observational Study
Shannon D. Sullivan, MD, PhD, Amy Lehman, MAS, Fridtjof Thomas, PhD,
Karen C. Johnson, MD, MPH, Rebecca Jackson, MD, Jean Wactawski-Wende, PhD,
Marcia Ko, MD, Zhao Chen, PhD, MPH, J. David Curb, MD, MPH, and
Barbara V. Howard, PhD
Analysis of postmenopausal women from the Women’s Health Initiative Observational
Cohort demonstrated that women with an early age (<40 yrs) of self-reported menopause
have lower bone mineral density and increased fracture risk compared to women
reporting normal menopause age (>50 yrs). These data suggest that age of menopause
should be considered in fracture risk assessment among postmenopausal women.

1045
Body composition and bone mineral density after ovarian hormone suppression
with or without estradiol treatment
Karen L. Shea, MD, Kathleen M. Gavin, PhD, Edward L. Melanson, PhD,
Ellie Gibbons, BS, Anne Stavros, BS, Pamela Wolfe, MS, John M. Kittelson, PhD,
Sheryl F. Vondracek, PharmD, Robert S. Schwartz, MD, Margaret E. Wierman, MD,
and Wendy M. Kohrt, PhD
Suppression of ovarian function for 5 months in premenopausal women resulted in decreases
in fat-free mass and lumbar spine and proximal femur bone mineral density that were prevented
by concurrent estradiol treatment. Total fat mass did not change with ovarian hormone
suppression but there were increases in abdominal subcutaneous and visceral fat areas.

(continued)
1053  
Vasomotor and depression symptoms may be associated with different sleep disturbance patterns in postmenopausal women  
Eleni Vousoura, PhD, Areti C. Spyropoulou, MD, Kalliopi L. Koundi, PhD, Chara Tzavara, PhD, Helen Verdeli, PhD, Thomas Paparrigopoulos, MD, Areti Augoulea, MD, Irene Lambrinoudaki, MD, and Iannis M. Zervas, MD  
In this study vasomotor symptoms and depression were associated with different patterns of sleep disturbance.

1058  
Midlife women’s symptom cluster heuristics: evaluation of an iPad application for data collection  
Nancy Fugate Woods, PhD, RN, FAAN, Rita Ismail, PhD, RN, MPH, MTD(HE), Lauri A. Linder, PhD, APRN, CPON, and Catherine Fiona Macpherson, PhD, RN, CPON  
Use of the Computerized Symptom Capture Tool for Menopause (C-SCAT M) affords women an opportunity to depict their symptoms and clusters.

1067  
Incidence of endometrial spotting or bleeding during continuous-combined estrogen-progestin therapy in postmenopausal women with and without hypertension  
Intira Sriprasert, MD, Hind Beydoun, PhD, Vanessa Barnabei, MD, PhD, Rami Nassir, MD, PhD, Andrea Z. LaCroix, PhD, and David F. Archer, MD  
The endometrial renin angiotensin aldosterone system may affect endometrial bleeding.

1076  
Life course exposure to smoke and early menopause and menopausal transition  
Hebatullah Tawfi k, DrPH, Jennie Kline, PhD, Judith Jacobson, DrPH, Parisa Tehranifar, DrPH, Angeline Protacio, MPH, Julie D. Flom, MPH, Piera Cirillo, MPH, Barbara A. Cohn, PhD, and Mary Beth Terry, PhD  
Both prenatal smoke exposure and current smoke exposure are independently related to earlier natural menopause using data from two US birth cohorts.

1084  
Prevalence and predictors of storage lower urinary tract symptoms in perimenopausal and postmenopausal women attending a menopause clinic  
Masakazu Terauchi, MD, PhD, NCMP, Asuka Hirose, MD, Mihoko Akiyoshi, PhD, Yoko Owa, BS, Kiyoko Kato, BS, and Toshiro Kubota, MD, PhD  
Multiple logistic regression analysis of women’s responses to the Menopause Health-Related Quality of Life questionnaire revealed independent associations between storage lower urinary tract symptoms and non-restorative sleep, body and visceral fat accumulation, and delayed reaction time.

1091  
Prognostic impact of chemotherapy-induced amenorrhea on premenopausal breast cancer: a meta-analysis of the literature  
Qiong Zhou, MM, Wenjin Yin, MD, Yueyao Du, MD, Zhenzhou Shen, MD, and Jingsong Lu, MD  
This meta-analysis was conducted to assess the prognostic value of adjuvant chemotherapy induced amenorrhea (CIA) for premenopausal breast cancer. The results clarified that CIA contributes to an improved prognosis in premenopausal women with ER-positive breast cancer.
1098
Risk factors for hot flashes among women undergoing the menopausal transition: baseline results from the Midlife Women’s Health Study
Lisa Gallicchio, PhD, Susan R. Miller, ScD, Judith Kiefer, MS, RN, Teresa Greene, Howard A. Zacur, MD, PhD, and Jodi A. Flaws, PhD
This study shows that older age, perimenopause status, cigarette smoking, and depressive symptoms are factors associated with a statistically significantly increased risk of the experience of any, current, more severe, and more frequent hot flashes among midlife women.

1108
Prevalence and severity of menopause symptoms and associated factors across menopause status in Korean women
Gyeyoon Yim, MPH, Younjin Ahn, PhD, Yoosoo Chang, MD, Seungho Ryu, MD, PhD, Joong-Yeon Lim, PhD, Danhee Kang, BS, Eun-Kyung Choi, MPH, Jiin Ahn, MSPH, Yuni Choi, BS, Juhee Cho, PhD, and Hyun-Young Park, MD, PhD
Obesity and physical activity were the main modifiable factors associated with symptom severity.

1117
Differential role of estrogen receptor modulators in depression-like behavior and memory impairment in rats with postmenopausal diabetes
Seema Bansal, MPharm, and Kanwaljit Chopra, PhD
Selective ER-β agonist ameliorates postmenopausal diabetic neurological dysfunction by elevating hippocampal brain derived neurotrophic factors and decreasing acetyl-cholinesterase activity.

1125
Herbal formula menoprogen alters insulin-like growth factor-1 and insulin-like growth factor binding protein-1 levels in the serum and ovaries of an aged female rat model of menopause
Min Wei, PhD, Sheng Z. Zheng, PhD, Ye Lu, PhD, Daniel Liu, PhD, Hong Ma, MD, and Gail B. Mahady, PhD
Menoprogen exerts a direct in vivo effect on aged female rats by positively regulating serum and ovarian insulin-like growth factor-1 and insulin-like growth factor binding protein-1 levels.

Brief Reports
1134
Safety of 3-year raloxifene treatment in Japanese postmenopausal women aged 75 years or older with osteoporosis: a postmarketing surveillance study
Yasuhiro Takeuchi, MD, PhD, Etsuro Hamaya, RPh, Masanori Taketsuna, MSc, and Hideaki Sowa, MD, PhD
This post hoc analysis investigated the safety of raloxifene as a long-term treatment for osteoporosis in postmenopausal Japanese women aged 75 years or over. The findings suggest no differences in adverse events in the age groups evaluated.
Hormonal contraception and postmenopausal hormone therapy in Spain: time trends and patterns of use
Laura Costas, MD, MPH, Victor-Guillermo Sequera, MD, MPH, Paloma Quesada, BHSc, Jone M. Altzibar, PhD, Virginia Lope, PhD, Beatriz Pérez-Gómez, MD, PhD, Yolanda Benavente, MStat, Vicente Martin, MD, PhD, Delphine Casabonne, PhD, Claudia Robles, PhD, Javier Llorca, MD, PhD, Conchi Moreno-Iribas, PhD, Guillermo Fernandez-Tardón, BSc, Victor Moreno, MD, PhD, Francisco Javier Caballero-Granado, PhD, Dolores Salas, MD, PhD, José Juan Jiménez-Moiéén, MD, PhD, Rafael Marcos-Gragera, MD, PhD, María-Dolores Chirlaque, MD, PhD, Pilar Amiano, PhD, Antonio Jose Molina, PhD, Gemma Castaño-Vinyals, PhD, Nuria Aragonés, MD, PhD, Manolis Kogevinas, MD, PhD, Marina Pollán, MD, PhD, and Silvia de Sanjosé, MD, PhD

A cross-sectional analysis using data from 1,954 population controls aged 24-85 in 12 provinces of Spain was performed. Several demographic, lifestyle, occupational and reproductive factors were associated with use of hormonal compounds.

Clinical Corner

NAMS Practice Pearl

1147

Testosterone for midlife women: the hormone of desire?
Jan L. Shifren, MD, NCMP

Should midlife women with declining levels of testosterone, low libido, and associated distressing sexual problems be treated with testosterone? This Practice Pearl reports clinical trial evidence, reviews the risks, and explains how testosterone might be used in a clinical setting.

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