



Menopause

The Journal of The North American Menopause Society

VOLUME 25, ISSUE 1 2018

SDC

Supplemental Digital Content is available.

CONTENTS

Editorials

1

Menopause 25th anniversary: past success and future direction

Isaac Schiff, CM, MD, Wulf H. Utian, MD, PhD, DSc, FRCOG, FACOG, FICS, and JoAnn V. Pinkerton, MD, FACOG, NCMP

4

More evidence why the product labeling for low-dose vaginal estrogen should be changed?

Cynthia A. Stuenkel, MD

7

Seeing the light: the need for randomized trials of vaginal laser in postmenopausal women

Caroline M. Mitchell, MD, MPH

9

Urinary incontinence: finding a voice to talk about “it”

Emily Von Bargen, DO

Original Articles

11

Breast cancer, endometrial cancer, and cardiovascular events in participants who used vaginal estrogen in the Women’s Health Initiative Observational Study

Carolyn J. Crandall, MD, MS, Kathleen M. Hovey, MS, Christopher A. Andrews, PhD, Rowan T. Chlebowski, MD, PhD, Marcia L. Stefanick, PhD, Dorothy S. Lane, MD, MPH, Jan Shifren, MD, Chu Chen, PhD, Andrew M. Kaunitz, MD, Jane A. Cauley, DrPH, and JoAnn E. Manson, MD, DrPH

The risks of cardiovascular disease and cancer were not elevated among postmenopausal participants in the Women’s Health Initiative Observational Study using vaginal estrogens, providing reassurance about the safety of treatment.

(continued)

Menopause: The Journal of The North American Menopause Society (ISSN 1072-3714) is published monthly for The North American Menopause Society by Wolters Kluwer Health, Inc., at 14700 Citicorp Drive, Bldg 3, Hagerstown, MD 21742. Business and production offices are located at Two Commerce Square, 2001 Market St., Philadelphia, PA 19103. All rights reserved. Printed on acid-free paper. Periodical postage paid at Hagerstown, Maryland, and at additional mailing offices. Copyright © 2017 by The North American Menopause Society.

POSTMASTER: Send address changes to *Menopause: The Journal of The North American Menopause Society*, P.O. Box 1610, Hagerstown, MD 21740.

21

Randomized, double-blind, placebo-controlled clinical trial for evaluating the efficacy of fractional CO₂ laser compared with topical estriol in the treatment of vaginal atrophy in postmenopausal women

Vera L. Cruz, MD, Marcelo L. Steiner, MD, PhD, Luciano M. Pompei, MD, PhD, Rodolfo Strufaldi, MD, PhD, Fernando L. Afonso Fonseca, PhD, Lucila H. Simardi Santiago, MD, PhD, Tali Wajsfeld, MD, and Cesar E. Fernandes, MD, PhD
CO₂ vaginal laser alone or in combination with topical estriol is a treatment option for vulvovaginal atrophy symptoms, but sexual-related pain with vaginal laser treatment may occur.

29

Factors associated with reasons incontinent midlife women report for not seeking urinary incontinence treatment over 9 years across the menopausal transition

L. Elaine Waetjen, MD, Guibo Xing, PhD, Wesley O. Johnson, PhD, Joy Melnikow, MD, Ellen B. Gold, PhD, for the Study of Women's Health Across the Nation (SWAN)
Using questionnaire data collected in the Study of Women's Health Across the Nation, the relationship between longitudinal changes in urinary incontinence (UI) characteristics, demographics, psychosocial factors and reasons women with UI reported for not seeking treatment were evaluated.

SDC

38

Cardiovascular fat in women at midlife: effects of race, overall adiposity, and central adiposity. The SWAN Cardiovascular Fat Study

Carrie Hanley, PhD, MPH, Karen A. Matthews, PhD, Maria M. Brooks, PhD, Imke Janssen, PhD, Matthew J. Budoff, MD, Akira Sekikawa, MD, PhD, Suresh Mulukutla, MD, and Samar R. El Khoudary, PhD, MPH, FAHA
Radical differences were found in cardiovascular fat (CF) volumes and in their associations with adiposity measures among midlife women. Future research should determine how race-specific changes in CF volume impact coronary heart disease risk in women.

46

Hormone therapy use in the Canadian Longitudinal Study on Aging: a cross-sectional analysis

Christy Costanian, MSc, Heather Edgell, PhD, Chris I. Ardern, PhD, and Hala Tamim, PhD
This study assessed the factors associated with hormone therapy use in Canada.

SDC

54

In-utero cigarette smoke exposure and the risk of earlier menopause

Talita C. Honorato, MD, Maaïke L. Haadsma, MD, PhD, Jolande A. Land, MD, PhD, Marike H. Boezen, PhD, Annemieke Hoek, MD, PhD, Henk Groen, MD, PhD, and on behalf of the Avon Longitudinal Study of Parents and Children (ALSPAC)

This study evaluates whether women who were exposed to smoke in-utero reach menopause earlier compared to non-exposed women. These results indicate that in-utero smoke exposure is not associated with earlier menopause for women who are non-smokers but increases the risk of earlier menopause for active smokers.

62

Sleep quality and its association with postural stability and fear of falling among Spanish postmenopausal women

Fidel Hita-Contreras, MD, PhD, Noelia Zagalaz-Anula, MHS, Antonio Martínez-Amat, PhD, David Cruz-Díaz, PhD, Indalecio Sánchez-Montesinos, MD, PhD, Agustín Aibar-Almazán, MHS, and Rafael Lomas-Vega, PhD

In Spanish postmenopausal women sleep duration, subjective sleep quality, and daytime dysfunction were independent risk factors for worsened postural stability. Fear of falling, anxiety, time since menopause onset, and BMI, unlike sleep quality, were independently associated with poor postural stability.

70

Is the age at menopause a cause of sexual dysfunction? A Brazilian population-based study

Caio Lett, MD, Ana L.R. Valadares, MD, PhD, Luiz F. Baccaro, MD, PhD, Adriana O. Pedro, MD, PhD, Jeffrey L. Filho, MD, Marcelo Lima, MS, and Lucia Costa-Paiva, MD, PhD

Arousal dysfunction was associated with early ovarian failure and premature ovarian insufficiency. The major factors affecting this association were having a partner with sexual problems, dyspareunia, and no satisfaction with the partner as a lover.

77

Serum uric acid levels and hormone therapy type: a retrospective cohort study of postmenopausal women

Jae H. Jung, MD, MS, Gwan G. Song, MD, PhD, Young H. Lee, MD, PhD, Jae-Hoon Kim, MD, PhD, Myung H. Hyun, MD, and Sung J. Choi, MD, PhD

The administration of estrogen plus progestogen therapy was found to be associated with reduced serum uric acid levels in postmenopausal women. Estrogen therapy or tibolone use did not significantly reduce serum uric acid levels in postmenopausal women.

82

Impact of age at first childbirth on primary open-angle glaucoma

Sangshin Park, DVM, MPH, PhD, and Nam-Kyong Choi, BPharm, PhD

This study, based on a cross-sectional nationwide survey, reported that age at first childbirth was associated with the risk of primary open-angle glaucoma.

89

Body composition, cardiometabolic risk factors, physical activity, and inflammatory markers in premenopausal women after a 10-year follow-up: a MONET study

Sahar Razmjou, MSc, Joseph Abdounour, PhD, Jean-Philippe Bastard, MD, PhD, Soraya Fellahi, MD, Éric Doucet, PhD, Martin Brochu, PhD, Jean-Marc Lavoie, PhD, Rémi Rabasa-Lhoret, MD, PhD, and Denis Prud'homme, MD, MSc

Physical activity could lead to an increase of some biomarkers potentially "beneficial" (adiponectin and HDL-C) in healthy non-obese premenopausal women going through menopause transition and postmenopausal periods. However, it is possible that the increase in low-grade inflammation and lipid disorders may outweigh the beneficial effects and may, in the long term, overcome them.

98

Perimenopausal arthralgia in the shoulder

Seunghyun Yoon, MD, PhD, Doo-hyung Lee, MD, PhD, and Junyoung Bang, MD

This study evaluated the relationship between menopause and shoulder arthralgia, specifically synovitis. These findings can help clinicians correctly diagnose and treat shoulder arthralgia in perimenopausal women.

Brief Report

SDC

102

Patient characteristics, menopause symptoms, and care provided at an interdisciplinary menopause clinic: retrospective chart review

Beate C. Sydora, MSc, PhD, Nese Yuksel, PharmD, Nicole L. Veltri, MD, Justin Marillier, MB, ChB, Christoph P. Sydora, BSc, Maryna Yaskina, PhD, Lori Battochio, RN, Tami M.L. Shandro, MD, and Sue Ross, PhD

This study provides insight into the variety of symptoms experienced and complexity of care faced in a menopause clinic and highlights the need for more rigorous research with the goal to help guide clinicians in managing menopause patients with a variety of complex medical concerns.

Clinical Corner

NAMS Practice Pearl

106

Restoring vaginal function in postmenopausal women with genitourinary syndrome of menopause

Risa Kagan, MD, FACOG, CCD, NCMP, and Eliza Rivera, PT, DPT, WCS

Unlike vasomotor symptoms, which improve over time, symptoms of the genitourinary syndrome of menopause are chronic and progressive and will generally not resolve without a therapeutic intervention. This Practice Pearl addresses the pathophysiology and effect of atrophic genital changes and offers advice on how vaginal health and comfortable sexual activity can be restored.

The bidirectional relationship between vasomotor symptoms and depression across the menopausal transition: a systematic review of longitudinal studies

Rifani B. Natari, MSc, Alexandra M. Clavarino, PhD, Treasure M. McGuire, PhD, Kaeleen D. Dingle, PhD, and Samantha A. Hollingworth, PhD

This study found a bidirectional relationship between vasomotor symptoms and depressive symptoms, but not major depressive disorder, across the menopausal transition. There was little evidence of differential effect between night sweats and hot flashes on depression.

Wolters Kluwer Health, Inc., and The North American Menopause Society cannot be held responsible for errors or for any consequences arising from the use of the information contained in this journal. All advertising material published in this journal is expected to conform to regulatory and medical standards. The appearance of advertising in this publication does not constitute a guarantee or endorsement by The North American Menopause Society or Wolters Kluwer Health, Inc., of the quality or value of such a product or service or any claims made by its marketer.

PERMISSION TO PHOTOCOPY ARTICLES: This publication is protected by copyright. Permission to reproduce copies of articles for noncommercial use may be obtained from the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, Tel: (978) 750-8400, FAX: (978) 750-4470, URL: <http://www.copyright.com>. For permissions to reuse the material for other purposes: Please go to the Journal website and click the "Permissions" link above the title of the paper in the abstract or html window for the relevant article. Alternatively, send an email to customer-care@copyright.com. Translation Rights & Licensing queries: Please contact, Silvia Serra, Translations Rights, Licensing & Permissions Manager, Wolters Kluwer Health (Medical Research) Ltd, 250 Waterloo Road, London SE1 8RD, UK. Phone +44 (0)207 981 0600; Silvia.Serra@wolterskluwer.com. *Menopause: The Journal of The North American Menopause Society* is a registered trademark of The North American Menopause Society.

Menopause: The Journal of The North American Menopause Society (ISSN 1072-3714) is published monthly by Wolters Kluwer Health, Inc., at 14700 Citicorp Drive, Bldg 3, Hagerstown, MD 21742. Business offices are located at Two Commerce Square, 2001 Market St., Philadelphia, PA 19103. Periodical postage paid at Hagerstown, MD, and at additional mailing offices. **Annual subscription rates:** *United States*—\$538 Individual, \$1,280 Institution. *Rest of World*—\$562 Individual, \$1,280 Institution. All prices include a handling charge. Subscription orders outside the United States must be prepaid. Subscription orders outside North America must add \$16.00 for airfreight delivery. United States residents of AL, CO, DC, FL, GA, HI, IA, ID, IN, KS, KY, LA, MD, MO, ND, NM, NV, PR, RI, SC, SD, UT, VT, WA, WV add state sales tax. The GST tax of 7% must be added to all orders shipped to Canada (Wolters Kluwer Health, Inc., GST Identification #895524239, Publications Mail Agreement #1119672). Subscription prices outside the United States must be prepaid. Prices subject to change without notice. Visit us online at www.lww.com. Individual subscription rates include print and access to the online version. Institutional rates are for print only; online subscriptions are available via Ovid. Institutions can choose to purchase a print and online subscription together for a discounted rate. Institutions that wish to purchase a print subscription, please contact Wolters Kluwer Health, Inc., at 14700 Citicorp Drive, Bldg 3, Hagerstown, MD 21742; phone 800-638-3030 (outside the United States 301-223-2300); fax 301-223-2400. Institutions that wish to purchase an online subscription or online with print, please contact the Ovid Regional Sales Office near you or visit www.ovid.com/site/index.jsp and select Contact and Locations. **Address for subscription information, orders, or change of address:** Wolters Kluwer Health, Inc., P.O. Box 1610, Hagerstown, MD 21740; phone 800-638-3030 (outside the United States 301-223-2300); fax 301-223-2400. In Japan, contact Wolters Kluwer Health Japan Co., Ltd., Forecast Mita Building 5th floor, 1-3-31 Mita Minato-ku, Tokyo, Japan 108-0073. Telephone: +81 3 5427 1969. E-mail: journal@wkjapan.co.jp. Address advertising inquiries to Renee Artuso at Wolters Kluwer Health, Inc., 530 Walnut Street, Philadelphia, PA 19106 USA.

Postmaster: Send address changes to *Menopause: The Journal of The North American Menopause Society*, P.O. Box 1610, Hagerstown, MD 21740.

Copyright © 2017 by The North American Menopause Society. All rights reserved. Printed in the USA.