



Menopause

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Nanette F. Santoro, MD

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Anxiety and hot flashes as predictors of mid-life palpitations: getting to the heart of the matter in the time of COVID-19

Nancy King Reame, MSN, PhD, FAAN

Original Studies

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Predictors of the age at which natural menopause occurs in women with type 1 diabetes: the Pittsburgh Epidemiology of Diabetes Complications (EDC) study

Yan Yi, MPH, Samar R. El Khoudary, PhD, Jeanine M. Buchanich, PhD, Rachel G. Miller, PhD, Debra Rubinstein, MD, Trevor J. Orchard, MBBCH, and Tina Costacou, PhD

Higher average levels of insulin dose and albumin excretion rate (AER) over time were significantly associated with a younger age at which natural menopause occurred among women with Type 1 Diabetes (T1D). The biologic mechanisms underlying the observed associations between exogenous insulin dose and AER on reproductive health should be investigated among women with T1D.

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Independent association of palpitation with vasomotor symptoms and anxiety in middle-aged women

Haruka Enomoto, BS, Masakazu Terauchi, MD, PhD, NCMP, Tamami Odai, MD, PhD, Kiyoko Kato, BS, Makoto Iizuka, MD, PhD, Mihoko Akiyoshi, PhD, and Naoyuki Miyasaka, MD, PhD

Rapid or irregular heartbeats are highly prevalent in middle-aged women. They are not associated with age, menopausal status, heart rate, arrhythmia, autonomic nervous system activity, caffeine, or alcohol consumption, but with vasomotor symptoms and anxiety.

(continued)

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A prospective controlled study of sexual function and sexually related personal distress up to 12 months after premenopausal risk-reducing bilateral salpingo-oophorectomy

Rakibul M. Islam, PhD, Susan R. Davis, MD, Robin J. Bell, MD, Trevor Tejada-Berges, MD, Caspar David Wrede, MB, BChir, Susan M. Domchek, MD, Bettina Meiser, PhD, Judy Kirk, MD, Efrosinia O. Krejany, MSc, and Martha Hickey, MD

This prospective controlled observational study of premenopausal risk-reducing bilateral salpingo-oophorectomy (RRBSO), observed an increase in sexual dysfunction after RRBSO which was mitigated by the use of estrogen therapy.

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Comparison of topical fractional CO₂ laser and vaginal estrogen for the treatment of genitourinary syndrome in postmenopausal women: a randomized controlled trial

Paula Fernanda Santos Pallone Dutra, MD, Thais Heinke, MD, PhD, Stella Catunda Pinho, MD, Gustavo Rubino Azevedo Focchi, PhD, Fernanda Kesselring Tso, MD, PhD,

Bruna Cristine de Almeida, PhD,IVALDO SILVA, PhD, and Neila Maria Góis Speck, MD, PhD

The results of this study suggest that fractional CO₂ laser therapy may be a viable therapeutic option, especially in situations where the use of topical hormones is not desired or contraindicated.

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A 16-week concurrent exercise program improves emotional well-being and emotional distress in middle-aged women: the FLAMENCO project randomized controlled trial

Virginia A. Aparicio, PhD, Marta Flor-Aleman, BSc, Nuria Marín-Jiménez, BSc, Irene Coll-Risco, PhD, and Pilar Aranda, PhD

The 16-week exercise program developed within the FLAMENCO project improved psychological well-being (positive and negative affect) compared to the counselling group.

772

A decision tree analysis on multiple factors related to menopausal symptoms

Eun-Ok Im, PhD, MPH, FAAN, Jee-Seon Yi, PhD, MPH, RN, and Wonshik Chee, PhD

This study identified the selected combined characteristics of midlife women that were closely linked to menopausal symptom experience in four racial/ethnic groups of midlife women in the U.S.

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Coronary artery disease prediction based on breast arterial calcification in women undergoing mammography as a screening for breast cancer

Jan Pudil, MD, Petra Steyerová, MD, Iva Macová, MD, David Zemánek, MD, PhD, Aleš Král, MD, PhD, Michal Pad'our, MD, Zhi Chen, MSc, Jan Daneš, MD, PhD, and Tomáš Kovárník, MD, PhD

This study did not prove an association between the presence and level of breast artery calcification (BAC) and coronary artery disease assessed by coronary angiography. However, the most advanced form of coronary artery disease – triple vessel disease – was associated with presence of BAC.

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Predicting the age at natural menopause in middle-aged women

Matti Hyvärinen, MSc, Juha Karvanen, DSc, Pauliina Aukee, PhD, MD, Tuija H. Tammelin, PhD, Sarianna Sipilä, PhD, Urho M. Kujala, PhD, MD, Vuokko Kovanen, PhD, Timo Rantalainen, DSc, and Eija K. Laakkonen, PhD

This longitudinal study focused on developing models for predicting the age at natural menopause in middle-aged women. The results indicate that the developed models can provide easily accessible information about the timing of natural menopause for clinicians making decisions that are affected by approaching menopause.

800

Adding marrow R2* to proton density fat fraction improves the discrimination of osteopenia and osteoporosis in postmenopausal women assessed with 3D FACT sequence

Guanwu Li, MD, Zheng Xu, MS, Xuefeng Li, BS, Xiaoyong Zuo, MS, Shixin Chang, MD, Dongmei Wu, PhD, and Yongming Dai, PhD

Simultaneous estimation of marrow R2 and proton density fat fraction (PDFF) improves discrimination of osteopenia and osteoporosis in comparison with PDFF or R2* alone.*

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Association of equol with obesity in postmenopausal women

Atsushi Takahashi, MD, PhD, Yukio Anzai, MD, PhD, Nobuo Tanji, MD, PhD, Hiromichi Imaizumi, MD, Masashi Fujita, MD, Manabu Hayashi, MD, PhD, Kazumichi Abe, MD, PhD, and Hiromasa Ohira, MD, PhD

Equol was significantly associated with overweight and visceral obesity in postmenopausal women.

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Stages of menopause and abnormal lung function: a cross-sectional study of middle-aged women

Yun Soo Hong, MD, MHS, Hye Yun Park, MD, PhD, Yoosoo Chang, MD, PhD, Eun Hee Jang, MS, Di Zhao, PhD, Seolhye Kim, MD, MSc, Eliseo Guallar, MD, DrPH, Hoon Kim, MD, PhD, NCMP, Juhee Cho, PhD, and Seungho Ryu, MD, PhD

In this large study of middle-aged women, the fully-adjusted prevalence of abnormal lung function, particularly that of restrictive ventilatory disorder, was higher in women in late menopausal transition and menopausal stages compared to women in premenopausal stage.

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Associations between polygenic risk score for age at menarche and menopause, reproductive timing, and serum hormone levels in multiple race/ethnic groups

Wei Zhao, PhD, Jennifer A. Smith, MPH, PhD, Lawrence F. Bielak, MPH, DDS, Edward A. Ruiz-Narvaez, ScD, Miao Yu, MS, Michelle M. Hood, MS, Patricia A. Peysers, PhD, Sharon L.R. Kardia, PhD, and Sioban D. Harlow, PhD

The results of this study highlight a shared genetic basis among multiple facets of reproductive aging across four race/ethnic populations, including age at menopause, length of the menopausal transition and the reproductive lifespan, and hormone levels before and after the final menstrual period.

Brief Report

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Experiences of menopause during incarceration

Elana F. Jaffe, MPH, Aunchalee E.L. Palmquist, PhD, MA, IBCLC, and Andrea K. Knittel, MD, PhD

Individuals going through the menopause transition while experiencing incarceration have significant unmet needs and poor access to relieving lifestyle changes or medical interventions. Policy and practice changes should address menopause related needs of individuals experiencing incarceration.

Clinical Corner

NAMS Practice Pearl

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Cognitive-behavior therapy for sleep disorders at midlife

Sara Nowakowski, PhD, CBSM, DBSM, and Jessica M. Meers, MA

Cognitive-behavior therapy for insomnia is a short-term, skill-focused psychotherapy targeting maladaptive behaviors and cognitions contributing to chronic insomnia. It is an effective treatment for insomnia disorder across women's lifespans, including during midlife and the menopause transition.

Review Article

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Evaluation of systemic estrogen for preventing urinary tract infections in postmenopausal women

Kate A. Fox, BS, Erica M. Lokken, PhD, MS, Susan D. Reed, MD, MPH, and David D. Rahn, MD

Urinary tract infections (UTI) will continue to be a significant cause of morbidity and hospitalizations in postmenopausal women unless more research is done to better understand the role of estrogen on UTI rates. The evidence arguing use (or abandonment) of systemic estrogen for the prevention of recurrent UTI is based on few studies with substantial methodologic limitations; there is significant room for improvement.

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