



Menopause

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Long-term oral bisphosphonate use in relation to fracture risk in postmenopausal women with breast cancer: findings from the Women's Health Initiative

Rebecca L. Drieling, MPH, PhD, Andrea Z. LaCroix, PhD, MPH, Shirley A.A. Beresford, PhD, MS, Denise M. Boudreau, PhD, Charles Kooperberg, PhD, Rowan T. Chlebowski, MD, PhD, Margery Gass, MD, Carolyn J. Crandall, MD, MS, Catherine R. Womack, MD, and Susan R. Heckbert, MD, PhD

This study found that among women with breast cancer additional years of bisphosphonate use was associated with higher fracture risk when bisphosphonate exposure was modeled as a continuous variable in multivariate-adjusted models.

1176

Anthropometric and cardiovascular responses to hypertrophic resistance training in postmenopausal women

Brandon S. Shaw, PhD, Monique Gouveia, BHons, Shannon McIntyre, BHons, and Ina Shaw, PhD

The addition of a hypertrophic resistance training program, even if performed only twice weekly, produces substantial simultaneous improvements in multiple anthropometric, cardiovascular and muscle strength variables in postmenopausal women. As such, hypertrophic resistance training should be included in any exercise training regime or as an adjunct lifestyle approach in combination with other treatments in postmenopausal women.

(continued)

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1182

Age at menarche, androgen concentrations, and midlife obesity: findings from the Midlife Women's Health Study

Lisa Gallicchio, PhD, Jodi A. Flaws, PhD, and Rebecca L. Smith, DVM, MS, PhD

Baseline data were analyzed from a cohort study of women in midlife to determine if the association between age at menarche and midlife obesity is due to variation in circulating androgen concentrations. Results show that the relationship between age at menarche and midlife obesity is independent of free androgen concentration in adulthood.

1189

Cardiovascular, hemodynamic, neuroendocrine, and inflammatory markers in women with and without vasomotor symptoms

Jennifer L. Gordon, PhD, David R. Rubinow, MD, Rebecca C. Thurston, PhD, Julia Paulson, BS, Peter J. Schmidt, MD, and Susan S. Girdler, PhD

In 186 women in the menopause transition or early postmenopause, greater self-reported vasomotor symptom disturbance predicted a profile of increased hypothalamic-pituitary-adrenal axis and central sympathetic activation, greater vasoconstriction, and higher levels of the inflammatory cytokine, IL-6, at rest and in response to a mental stressor battery.

1199

Reduced risk of breast cancer mortality in women using postmenopausal hormone therapy: a Finnish nationwide comparative study

Tomi S. Mikkola, MD, PhD, Hanna Savolainen-Peltonen, MD, PhD, Pauliina Tuomikoski, MD, PhD, Fabian Hoti, PhD, Pia Vattulainen, MSc, Mika Gissler, M.SocSci, PhD, and Olavi Ylikorkala, MD, PhD

This Finnish study shows that breast cancer death risk is less among patients with previous exposure to hormone therapy.

1204

Timing and persistence of effect of conjugated estrogens/bazedoxifene in postmenopausal women

Risa Kagan, MD, FACOG, CCD, NCMP, Barry S. Komm, PhD, Kelly A. Ryan, MS, BSN, Joanne Lavenberg, BS, Ching-Ray Yu, PhD, and JoAnn V. Pinkerton, MD

This post hoc analysis identified when conjugated estrogens 0.45 or 0.625 mg with bazedoxifene 20 mg first achieved a statistically significant difference versus placebo, and the duration the difference persisted, for prespecified efficacy endpoints in the individual phase 3 SMART trials. Both doses achieved significance versus placebo at early assessments for most outcomes, and benefits were well maintained.

1214

Extended-release oxybutynin therapy for vasomotor symptoms in women: a randomized clinical trial

James A. Simon, MD, CCD, NCMP, IF, FACOG, Tatiana Gaines, MD, MPH, Katherine D. LaGuardia, MD, MPH, for the Extended-Release Oxybutynin Therapy for VMS Study Group

Oxybutynin is an effective, nonhormonal therapy for moderate-to-severe vasomotor symptoms, producing significant reductions in both frequency and severity of moderate-to-severe vasomotor symptoms compared to placebo at all weeks of treatment ($P \leq 0.007$, all time points) through week 12.

1222

Measuring hot flash phenomenology using ambulatory prospective digital diaries

William I. Fisher, PhD, and Rebecca C. Thurston, PhD

This study provides the description, protocol and results from a novel prospective ambulatory digital hot flash phenomenon diary. The hot flash experiences of 152 midlife women with daily hot flashes were sampled using an ambulatory electronic hot flash diary continuously for the waking hours of 3 consecutive days providing unique insights into the phenomenology, loci and associated characteristics of hot flashes.

1228

Bone loss after oophorectomy among high-risk women: an NRG oncology/gynecologic oncology group study

Elizabeth A. Hibler, MPH, PhD, James Kauderer, MA, Mark H. Greene, MD, Gustavo C. Rodriguez, MD, and David S. Alberts, MD

This study demonstrates that premenopausal women undergoing oophorectomy experience bone loss, an adverse effect of oophorectomy, which requires attention and active management.

1233

In-hospital complications of vaginal versus laparoscopic-assisted benign hysterectomy among older women: a propensity score-matched cohort study

Jerry Cheng-Yen Lai, PhD, Hung-Hui Chen, MSc, Sheng-Miauh Huang, PhD, Kung-Liahng Wang, MD, Nicole Huang, PhD, Hsiao-Yun Hu, PhD, and Yiing-Jenq Chou, MD, PhD

The shorter hospital stay and low in-hospital complications associated with laparoscopic, as opposed to vaginal hysterectomies, are important attributes of a surgical procedure in women aged 65 years or more.

1239

Menopause is associated with articular cartilage degeneration: a clinical study of knee joint in 860 women

Chao Lou, MD, Guangheng Xiang, MD, Qiaoyou Weng, MD, Zhaojie Chen, MD, Deheng Chen, MD, Qingqing Wang, MD, Di Zhang, MD, Bin Zhou, MD, Dengwei He, MD, and Hongliang Chen, MD, PhD

After adjusting for covariates, cartilage showed progressive severe degeneration that occurred in the first 25 years since menopause, suggesting estrogen deficiency may be a risk factor of cartilage degeneration of the knee joint.

1247

Low AMH levels as a marker of reduced ovarian reserve in young women affected by Down's syndrome

Daniela Romualdi, MD, PhD, Caterina Proto, MD, Simona De Cicco, MD, Valentina Immediata, MD, Concetta Barone, MD, Corrado Romano, MD, and Antonio Lanzzone, MD, PhD

Antimullerian hormone levels were significantly lower in Down's Syndrome (DS) women compared to age matched controls. Subanalysis of data in DS women under 30 years of age suggests an early follicular depletion related to trisomy 21.

1252

Efficacy of *Tribulus terrestris* for the treatment of hypoactive sexual desire disorder in postmenopausal women: a randomized, double-blinded, placebo-controlled trial

Karla Zanolla Dias de Souza, MD, Fabiene Bernardes Castro Vale, MD, and Selmo Geber, MD, PhD
Tribulus terrestris might be a safe alternative for the treatment of hypoactive sexual desire disorder in postmenopausal women reducing the symptoms and increasing the levels of free and bioavailable testosterone levels.

1257

Anxiogenic CO₂ stimulus elicits exacerbated hot flash-like responses in a rat menopause model and hot flashes in postmenopausal women

Lauren M. Federici, BS, Sarah Dorsey Roth, BSN, Connie Krier, BS, Stephanie D. Fitz, Todd Skaar, PhD, Anantha Shekhar, MD, PhD, Janet S. Carpenter, PhD, RN, FAAN, and Philip L. Johnson, PhD
This study demonstrated that an anxiogenic stimulus that signals air hunger (hypercapnic gas) is capable of inducing cutaneous vasomotor responses in ovariectomized rats, and eliciting hot flashes in postmenopausal women.

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