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Spectral response in reversing coronary artery atherosclerosis with vitamin D supplementation in postmenopausal cynomolgus monkeys
James K. Pru, PhD

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Physical activity and healthy aging
Antonio Cano, MD, PhD

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Intimate partner violence and the climacteric
Erin E. Tracy, MD, MPH

Original Articles

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Vitamin D and conjugated equine estrogen: the association with coronary artery atherosclerosis in cynomolgus monkeys
Rebekah McCurdy, MD, Xuezhi Jiang, MD, FACOG, NCMP, Thomas B. Clarkson, DVM, Matthew Nudy, MD, and Peter F. Schnatz, DO, FACOG, FACP, NCMP
Monkeys with increases in 25OHD₃ concentrations had significantly less severe coronary artery atherosclerosis. Those with increases in 25OHD₃ with conjugated equine estrogen were associated with significantly decreased American Heart Association lesion scores.

488
Sedentary lifestyle in middle-aged women is associated with severe menopausal symptoms and obesity
Juan E. Blümel, MD, PhD, Juan Fica, PhD, Peter Chedraui, MD, PhD, Edward Mezones-Holguín, MSc, Maria C. Zuñiga, PhD, Silvina Witis, PhD, María S. Vallejo, PhD, Konstantinos Tserotas, MSc, Hugo Sánchez, MD, William Onatra, PhD, Eliana Ojeda, MD, Desireé Mostajo, PhD, Alvaro Monterrosa, PhD, Selva Lima, MD, Mabel Martino, PhD, José A. Hernández-Bueno, MD, Gustavo Gómez, MSc, María T. Espinoza, PhD, Daniel Flores, MD, Andrés Calle, MSc, Luz M. Bravo, MD, Zully Benitez, MD, Ascanio Bencosme, MD, Germán Barón, PhD, Sócrates Aedo, PhD, for the Collaborative Group for Research of the Climacteric in Latin America
Female sedentary lifestyle was related to more severe menopausal symptoms and obesity.
494
The association between recent abuse and menopausal symptom bother: results from the Data Registry on Experiences of Aging, Menopause, and Sexuality (DREAMS)
Suneela Vegunta, MD, FACP, NCMP, Carol Kuhle, DO, Juliana M. Kling, MD, Julia A. Files, MD, Ekta Kapoor, MBBS, Paru S. David, MD, Jordan Rullo, PhD, LP, Richa Sood, MD, Jacqueline M. Thielen, MD, Aminah Jatoi, MD, Darrell R. Schroeder, MSc, and Stephanie S. Faubion, MD
This is a study from the Data Registry on Experiences of Aging, Menopause, and Sexuality which demonstrated that menopausal symptom bother scores were directly associated with recent self-reported abuse.

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Changes in heart rate variability during vasomotor symptoms among midlife women
Rebecca C. Thurston, PhD, Karen A. Matthews, PhD, Yuefang Chang, PhD, Nanette Santoro, MD, Emma Barinas-Mitchell, PhD, Roland von Känel, MD, Doug P. Landsittel, PhD, and J. Richard Jennings, PhD
Among 215 nonsmoking midlife women, physiologically-measured vasomotor symptoms were accompanied by acute decrease in cardiac vagal control, irrespective of whether the vasomotor symptoms were reported. Findings can contribute to the understanding of vasomotor symptom physiology.

506
A randomized, double-blind, placebo-controlled phase 2 pilot trial evaluating a novel, vaginal softgel capsule containing solubilized estradiol
James H. Pickar, MD, Julia M. Amadio, John M. Hill, MD, Brian A. Bernick, MD, and Sebastian Mirkin, MD
A novel vaginal estradiol soft gel capsule showed positive safety and efficacy endpoints for postmenopausal women with moderate-to-severe vulvovaginal atrophy. This vaginal E2 capsule significantly increased the percentage of superficial cells, reduced the percentage of parabasal cells and the vaginal pH, and improved visual assessments of the vaginal mucosa more than placebo.

511
Plasma fibrin clot properties in postmenopausal women: effects of hormone therapy
Magdalena M. Piróg, MD, Tomasz Milewicz, MD, Robert Jach, MD, and Anetta Undas, MD, PhD
The study provides new insights into the effect of different forms of hormone therapy (transdermal and oral) on plasma fibrin properties, indicating that this therapy does not lead to major unfavorable alterations if initiated around the age of 50 years in women without severe comorbidities.

518
The longitudinal relation of stress during the menopausal transition to fibrinogen concentrations: results from the Study of Women’s Health Across the Nation
April M. Falconi, PhD, MPH, MA, Ellen B. Gold, PhD, and Imke Janssen, PhD
Perimenopausal women report perceiving higher levels of stress than premenopausal women; however, such stress is not significantly related to changes in fibrinogen, a marker of inflammation.

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Cardiac repolarization in recently postmenopausal women with or without hot flushes
Hanna Lantto, MD, Tomi S. Mikkola, MD, PhD, Pauliina Tuomikoski, MD, PhD, Matti Viitasalo, MD, PhD, Heikki Viäänen, LicSc, Anssi R.A. Sovijärvi, MD, PhD, and Petri Haapalahdi, MD, PhD
The sudden sympathetic surge during the night-time hot flush has direct effects on cardiac repolarization.
535  Contributing factors for menopausal symptoms after surgical staging for endometrial cancer
Koji Matsuo, MD, PhD, Marc R. Gualtieri, MD, Sigita S. Cahoon, MD, Michael D. Toboni, MPH,
Hiroko Machida, MD, Aida Moeini, MD, Kosei Hasegawa, MD, PhD, Donna Shoupe, MD, MBA,
and Lynda D. Roman, MD
Low albumin level at the time of surgical staging was associated with decreased risk of
developing menopausal symptoms in premenopausal women with endometrial cancer.

544  Elevated serum progesterone levels in postmenopausal women with mucinous ovarian tumors
Ayumu Matsuoka, MD, Shinichi Tate, MD, PhD, Kyoko Nishikimi, MD,
Hiroshi Ishikawa, MD, PhD, and Makio Shozu, MD, PhD
Serum progesterone level is significantly elevated in postmenopausal women with mucinous
ovarian tumors and may represent a useful biomarker for predicting tumor histology preopera-
tively.

550  Examining the relationship between hormone therapy and dry-eye syndrome in postmenopausal women: a cross-sectional comparison study
Ahmed AlAwlaqi, MBBS, MSc, and Mohamed Hammadeh, PhD
The current cross-sectional research suggests that hormone therapy is not a protective factor
against the severity of dry-eye syndrome in postmenopausal women.

556  Use of hormone therapy and isoflavones and mammographic density in Spain
Beatriz Isidoro, MD, PhD, Virginia Lope, BSc, PhD, Denis Whelan, BSc, Carmen Pedraz, MD,
Carmen Sánchez-Contador, MD, Carmen Santamariña, BN, Pilar Moreo, MD, Carmen Vidal, MD,
Dolores Salas-Trejo, MD, PhD, María Ederra, MD, PhD, Nuria Aragonés, MD, PhD,
Beatriz Pérez-Gómez, MD, PhD, and Marina Pollán, MD, PhD
This study shows that the use of hormone therapy (HT) or isoflavone therapy among Spanish
postmenopausal women is low. No association was observed between HT and mammographic
density, however women who had used isoflavones in the past and those starting their use after
menopause had increased mammographic density.

565  Methoxyisoflavones formononetin and isoformononetin inhibit the differentiation of Th17 cells and B-cell lymphopoiesis to promote osteogenesis in estrogen-deficient bone loss conditions
Mohd N. Mansoori, MSc, Abdul M. Tyagi, PhD, Priyanka Shukla, MSc, Kamini Srivastava, PhD,
Kapil Dev, MSc, Raju Chhillara, MSc, Rakesh Maurya, PhD, and Divya Singh, PhD
The study reports the immunomodulatory activity of methoxyisoflavones, formononetin
and isoformononetin, which translates in improved skeletal parameters thereby preventing
ovariectomy induced bone loss in a BALB/c mice model.
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The association of Asn453Ser polymorphism in CYP1B1 gene with selected somatic and biochemical variables in Slovak women of different menopause status
Veronika Čerianová, RNDr, PhD, Zuzana Danková, RNDr, PhD, Lenka Luptáková, RNDr, PhD, Marta Cvičelová, RNDr, CSc, and Daniela Síváková, RNDr, CSc

The findings of this study show statistically significant influence of the allele Ser on elevated levels of HDL cholesterol in premenopausal and postmenopausal women as well as on higher levels of apolipoprotein A1 in postmenopausal women. Based on the results the allele Ser appears to have beneficial effect on plasma lipid profile.

Case Report

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Yoga increased serum estrogen levels in postmenopausal women—a case report
Rui Ferreira Afonso, MS, Elisa Harumi Kozasa, PhD, Dinah Rodrigues, BS, José Roberto Leite, PhD, Sérgio Tufik, MD, PhD, and Helena Hachul, MD, PhD

Many women search for complementary and alternative medicine such as yoga to treat climacteric symptoms. This study showed estrogen level increased and quality of life improvements after four months of yoga practice.