Selección de Resúmenes de Menopausia

Semana del 30 de mayo al 4 de Juniode 2018

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Sex differences in lipid and lipoprotein metabolism.

Palmisano BT, Zhu L, Eckel RH, Stafford JM.

BACKGROUND: Endogenous sex hormones are important for metabolic health in men and women. Before menopause, women are protected from atherosclerotic cardiovascular disease (ASCVD) relative to men. Women have fewer cardiovascular complications of obesity compared to men with obesity. Endogenous estrogens have been proposed as a mechanism that lessens ASCVD risk, as risk of glucose and lipid abnormalities increases when endogenous estrogens decline with menopause. While baseline risk is higher in males than females, endogenously produced androgens are also protective against fatty liver, diabetes and ASCVD, as risk goes up with androgen deprivation and with the decline in androgens with age. SCOPE OF REVIEW: In this review, we discuss evidence of how endogenous sex hormones and hormone treatment approaches impact fatty acid, triglyceride, and cholesterol metabolism to influence metabolic and cardiovascular risk. We also discuss potential reasons for why treatment strategies with estrogens and androgens in older individuals fail to fully recapitulate the effects of endogenous sex hormones. MAJOR CONCLUSIONS: The pathways that confer ASCVD protection for women are of potential therapeutic relevance. Despite protection relative to men, ASCVD is still the major cause of mortality in women. Additionally, diabetic women have similar ASCVD risk as diabetic men, suggesting that the presence of diabetes may offset the protective cardiovascular effects of being female through unknown mechanisms.

Musculoskelet Neuronal Interact. 2018 Jun 1;18(2):208-214.

Clinical manifestations of osteoarthritis in osteoporotic and osteopenic postmenopausal women.

Rizou S, Chronopoulos E, Ballas M, Lyritis GP.

OBJECTIVE: We investigated the frequency of clinical manifestations of osteoarthritis in women with low BMD. METHODS: This prospective epidemiological study investigated the degree of osteoarthritic pain and functional disability in symptomatic joints of a randomly selected population of postmenopausal Greek women aged >45 years with osteoporosis or osteopenia. Degree of osteoarthritic impairment (none, mild, moderate or severe) was classified at the knee, hip, neck or hand using a site-specific internationally validated osteoarthritis questionnaire. RESULTS: 3000 women were included with mean age of 66.7 years. Osteoporosis was more common than osteopenia. Mild osteoarthritic impairment was most prevalent. An inverse relationship between severity of osteoarthritic impairment and mean femoral neck T-score was observed, regardless of site. There was a significant difference in mean femoral neck T-score between patients with severe osteoarthritic impairment and those with no, mild, or moderate impairment. This was also observed when lumbar spine BMD results were pooled. CONCLUSIONS: Most postmenopausal women with low BMD suffer from osteoarthritic impairment, with an inverse association between severity of osteoarthritic impairment and mean femoral neck T-score. Mean lumbar spine or femoral neck T-scores of patients with severe osteoarthritic impairment were significantly lower than those of patients with less impairment.

Bone Joint J. 2018 Jun 1;100-B(6):780-786. doi: 10.1302/0301-620X.100B6.BJJ-2017-1183.R2.

Fractures and the increased risk of suicide.

Chang CF, Lai EC, Yeh MK.

Aims A high rate of suicide has been reported in patients who sustain fractures, but the association remains uncertain in the context of other factors. The aim of this study was to examine the association between fractures and the risk of suicide in this contextual setting. Patients and Methods We performed a case-control study of patients aged 40 years or older who died by suicide between 2000 and 2011. We included patients' demographics, physical and mental health problems, and socioeconomic factors. We performed conditional logistic regression to evaluate the associations between fractures and the risk of suicide. Results We included a total of 34 794 patients who died by suicide and 139 176 control patients. We found that fractures as a homogenous group (adjusted odds ratios (aOR), 1.48; 95% confidence interval

(CI) 1.43 to 1.53), and specifically pelvic (aOR 2.04; 95% CI 1.68 to 2.47) and spinal fractures (aOR 1.53; 95% CI 1.43 to 1.64), were associated with a higher risk of suicide. In addition, we found that patients who had a lower income, had never married, had lower levels of educational attainment, or had coexistent physical and mental conditions such as anxiety, mood disorders, and psychosis-related disorders had a higher risk of suicide. Conclusion Fractures, specifically those of the hip and spine, were associated with an increased risk of suicide. The findings suggest that greater clinical attention should be given to this risk in patients with fractures, especially for those with additional risk factors.

J Am Coll Cardiol. 2018 Jun 5;71(22):2555-2566. doi: 10.1016/j.jacc.2018.01.083.

Endogenous Sex Hormones and Incident Cardiovascular Disease in Post-Menopausal Women.

Zhao D, Guallar E, Ouyang P, Subramanya V, Vaidya D, Ndumele CE, Lima JA, Allison MA, Shah SJ, et al.

BACKGROUND: Higher androgen and lower estrogen levels are associated with cardiovascular disease (CVD) risk factors in women. However, studies on sex hormones and incident CVD events in women have yielded conflicting results. OBJECTIVES: The authors assessed the associations of sex hormone levels with incident CVD, coronary heart disease (CHD), and heart failure (HF) events among women without CVD at baseline. METHODS: The authors studied 2,834 post-menopausal women participating in the MESA (Multi-Ethnic Study of Atherosclerosis) with testosterone, estradiol, dehydroepiandrosterone, and sex hormone binding globulin (SHBG) levels measured at baseline (2000 to 2002). They used Cox hazard models to evaluate associations of sex hormones with each outcome, adjusting for demographics, CVD risk factors, and hormone therapy use. RESULTS: The mean age was 64.9 ± 8.9 years. During 12.1 years of follow-up, 283 CVD, 171 CHD, and 103 HF incident events occurred. In multivariable-adjusted models, the hazard ratio (95% confidence interval [CI]) associated with 1 SD greater log-transformed sex hormone level for the respective outcomes of CVD, CHD, and HF were as follows: total testosterone: 1.14 (95% CI: 1.01 to 1.29), 1.20 (95% CI: 1.03 to 1.40), 1.09 (95% CI: 0.90 to 1.34); estradiol: 0.94 (95% CI: 0.80 to 1.11), 0.77 (95% CI: 0.63 to 0.95), 0.78 (95% CI: 0.60 to 1.02); and testosterone/estradiol ratio: 1.19 (95% CI: 1.02 to 1.40), 1.45 (95% CI: 1.19 to 1.78), 1.31 (95% CI: 1.01 to 1.70). Dehydroepiandrosterone and SHBG levels were not associated with these outcomes. CONCLUSIONS: Among post-menopausal women, a higher testosterone/estradiol ratio was associated with an elevated risk for incident CVD, CHD, and HF events, higher levels of testosterone associated with increased CVD and CHD, whereas higher estradiol levels were associated with a lower CHD risk. Sex hormone levels after menopause are associated with women's increased CVD risk later in life.

J Endocr Soc. 2018 May 3;2(6):533-546. doi: 10.1210/js.2018-00090. eCollection 2018 Jun 1.

Subclinical Hypothyroidism in Women Planning Conception and During Pregnancy: Who Should Be Treated and How?

Maraka S, Singh Ospina NM, Mastorakos G, O'Keeffe DT.

Subclinical hypothyroidism (SCH), a mild form of hypothyroidism defined as elevated TSH with normal free thyroxine levels, is a common diagnosis among women of reproductive age. In some, but not all, studies, it has been associated with infertility, an increased risk of adverse pregnancy and neonatal outcomes, and possibly with an increased risk of neurocognitive deficits in offspring. Despite well-established recommendations on treatment of overt hypothyroid pregnant women, a consensus has not yet been reached on whether to treat women with SCH. This review focuses on examining the evidence informing the clinical strategy for using levothyroxine (LT4) in women with SCH during pregnancy and those who are planning conception. A crucial first step is to accurately diagnose SCH using the appropriate population-based reference range. For pregnant women, if this is unavailable, the recommended TSH upper normal limit cutoff is 4.0 mIU/L. There is evidence supporting a decreased risk for pregnancy loss and preterm delivery for pregnant women with TSH > 4.0 mIU/L receiving LT4 therapy. LT4 treatment has been associated with better reproductive outcomes in women with SCH undergoing artificial reproductive techniques, but not in those who are attempting natural conception. Thyroid function tests need to be repeated throughout pregnancy to monitor LT4 therapy. In addition to potential harms, LT4 contributes to treatment burden. During a consultation, clinicians and patients should engage in a careful consideration of the current evidence in the context of the patients' values and preferences to determine whether LT4 therapy initiation is the best next step.

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Menopausal hormone therapy and mild cognitive impairment: a randomized, placebo-controlled trial.

Yoon BK, Chin J, Kim JW, Shin MH, Ahn S, Lee DY, Seo SW, Na DL.

OBJECTIVE: The aim of the study was to explore the therapeutic potential of menopausal hormone therapy (MHT) in women with mild cognitive impairment (MCI). METHODS: Thirty-seven postmenopausal women (age range: 57-82 y) with multiple-domain, amnestic subtype MCI were randomly assigned to either placebo (n=18) or MHT (n=19) for 24 months (percutaneous estradiol [E2] gel [0.1%, 2 mg/d] and oral micronized progesterone [MP4] [100 mg/d]). All participants received donepezil, and apolipoprotein E genotype was determined. The primary endpoint was general cognitive function: Alzheimer's disease Assessment Scale, cognitive subscale, the Korean version of Mini-Mental State Examination (K-MMSE), and the Korean version of the Montreal Cognitive Assessment (MoCA_K) were performed in-person every 6 months. RESULTS: Twenty-one participants (placebo 13, MHT 8) completed the trial (56.8%). Progression rates to dementia were 52.9% (9/17) in the placebo group and 44.4% (8/18) in the MHT group. Within-group analysis showed that all three tests significantly worsened during the trial in the placebo, but not the MHT groups. Analysis adjusted for ε4 allele demonstrated that MHT significantly reduced deterioration of MoCA_K score, a sensitive tool for assessing global cognition in MCI (P=0.0261). Compared with the control group, both MoCA_K (P=0.043; mean difference, 3.85; 95% CI, -0.46 to 8.16) and K-MMSE (P=0.0319; mean difference, 3.26; 95% CI, 0.04-6.48) scores were significantly better at 24 months in the MHT group. CONCLUSIONS: Long-term MHT using percutaneous E2 gel and oral MP4 might attenuate cognitive decline in postmenopausal women with MCI.