Selección de Resúmenes de Menopausia

Semana del 31 de mayo al 6 de junio de 2017

Juan Enrique Blümel. Departamento Medicina Sur. Universidad de Chile

PLoS One. 2017 Jun 2;12(6):e0178490. doi: 10.1371/journal.pone.0178490. eCollection 2017.

Age-dependent regulation of obesity and Alzheimer-related outcomes by hormone therapy in female 3xTg-AD mice.

Christensen A, Pike CJ.

Depletion of ovarian hormones at menopause is associated with increased Alzheimer's disease (AD) risk. Hormone loss also increases central adiposity, which promotes AD development. One strategy to improve health outcomes in postmenopausal women is estrogen-based hormone therapy (HT), though its efficacy is controversial. The window of opportunity hypothesis posits that HT is beneficial only if initiated near the onset of menopause. Here, we tested this hypothesis by assessing the efficacy of HT against diet-induced obesity and AD-related pathology in female 3xTg-AD mice at early versus late middle-age. HT protected against obesity and reduced β-amyloid burden only at early middle-age. One mechanism that contributes to AD pathogenesis is microglial activation, which is increased by obesity and reduced by estrogens. In parallel to its effects on β-amyloid accumulation, we observed that HT reduced morphological evidence of microglial activation in early but not late middle-age. These findings suggest that HT may be effective during human perimenopause in reducing indices of obesity and AD-related pathology, a conclusion consistent with the window of opportunity hypothesis.

J Musculoskelet Neuronal Interact. 2017 Jun 1;17(2):50-58.

Relationship between muscle performance and DXA-derived bone parameters in community-dwelling older adults.

Singh H, Kim D, Bemben MG, Bemben DA.

OBJECTIVES: To examine association between muscle strength, jump test performance, muscle mass, bone mineral density (BMD), and bone strength in older adults. METHODS: Sixty individuals (55-75 years) participated. Leg press strength and bilateral hip abduction strength were evaluated by one repetition-maximum testing. Jump power (JPow) and jump height (JHt) were assessed by jump test performance. Relative skeletal muscle mass index (RSMI), total hip BMD, femoral neck BMD, lumbar spine BMD, section modulus (Z), cross-sectional moment of inertia (CSMI), and bone strength index (BSI) were determined by DXA. RESULTS: After adjusting for age and gender, leg press strength 1) positively correlated with the total hip BMD, femoral neck BMD, and Z (all P⟨0.05). Also, leg press strength predicted the total hip BMD (P=0.013) and femoral neck BMD (P=0.021), after adjusting for age, gender, and RSMI. No associations were found between jump test performance and bone density or strength. CONCLUSION: Leg press strength is positively associated with bone density and bone strength in older population. It might serve as an additional tool to identify at-risk individuals for osteoporosis.

J Womens Health (Larchmt). 2017 Jun 1. doi: 10.1089/jwh.2016.6063. [Epub ahead of print]

Race, Menopausal Hormone Therapy, and Invasive Breast Cancer in the Carolina Breast Cancer Study.

DeBono NL, Robinson WR, Lund JL, Tse CK, Moorman PG, Olshan AF, Troester MA.

PURPOSE: The use of combined estrogen-progestin menopausal hormone therapy (MHT) has been shown to increase the risk of breast cancer, however, recent observational studies have suggested that the association between MHT and breast cancer may be modified by race. The objective of this study was to investigate the association between MHT use and incidence of invasive breast cancer in Black and White women aged ≥40 years at diagnosis after accounting for racial differences in patterns of MHT use and formulation. METHODS: Data from the Carolina Breast Cancer Study, a population-based case-control study of Black and White women in North Carolina conducted between 1993 and 2001, was used to analyze 1474 invasive breast cancer cases and 1339 controls using unconditional logistic regression. RESULTS: Black women were less likely than White women to use any MHT and were more likely to use an unopposed-estrogen formulation. Combined estrogen-progestin MHT use was associated with a greater odds of breast cancer in White (adjusted odds ratio [OR] 1.48, 95% confidence interval [CI]: 1.03-2.13) and Black (OR 1.43, 95% CI: 0.76-2.70) women,

although the estimate in Black women was imprecise. In contrast, use of unopposed-estrogen MHT among women with prior hysterectomy was not associated with breast cancer in women of either race. CONCLUSION: The association between MHT and invasive breast cancer appears to be similar in both Black and White women after accounting for differences in formulation and prior hysterectomy. These findings emphasize the importance of accounting for MHT formulation in race-stratified analyses of breast cancer risk.

Climacteric. 2017 Jun 1:1-7. doi: 10.1080/13697137.2017.1329290. [Epub ahead of print]

Low bone mineral density is associated with breast cancer in postmenopausal women: a case-control study.

Ferreira Poloni P, Vespoli HL, Almeida-Filho BS, Bueloni-Dias F, Nahas-Neto J, Nahas EAP.

OBJECTIVE: To evaluate risk factors for low bone mineral density (BMD) in postmenopausal breast cancer survivors compared with postmenopausal women without breast cancer (controls). METHOD: In this study, 112 breast cancer survivors were compared to 224 women (controls). Inclusion criteria were amenorrhea ≥12 months, age 45-75 years, treated for breast cancer, and metastasis-free for at least 5 years. The control group consisted of women without breast cancer, matched by age and menopause status (in a proportion of 1: 2 as sample calculation). The risk factors for low BMD (osteopenia/osteoporosis) were assessed by interview. BMD was measured by dual-energy X-ray absorptiometry in the lumbar spine (L1-L4) and femoral neck. Logistic regression models (odds ratio, OR) were used to identify factors associated with low BMD. RESULTS: The mean (standard deviation) age of breast cancer survivors was 61.3 (9.7) years, with a mean follow-up of 10.2 (3.9) years. These women had a higher incidence of osteopenia (45.1%) and osteoporosis (22.3%) in the femoral neck than controls (39.3% and 9.0%, respectively) ($p = 0.0005$). Lumbar spine BMD did not differ between groups ($p = 0.332$). Univariate analysis adjusted for age and time since menopause revealed that chemotherapy (OR 6.90; 95% confidence interval (CI) 5.57-9.77) was associated with a higher risk of low BMD. Contrarily, regular physical exercise (OR 0.24; 95% CI 0.06-0.98) and a body mass index ≥30 kg/m2 (OR 0.09; 95% CI 0.02-0.37) reduced the risk among breast cancer survivors. CONCLUSION: Postmenopausal breast cancer survivors had a higher incidence of osteopenia and osteoporosis in the femoral neck than women without breast cancer. A history of chemotherapy was a risk factor for low BMD, whereas regular physical activity and high body mass index reduced the risk among breast cancer survivors.

Cephalalgia. 2017 Jun;37(7):627-647. doi: 10.1177/0333102417694883. Epub 2017 Mar 15.

Burning mouth syndrome.

Jääskeläinen SK, Woda A.

Objective To review the clinical entity of primary burning mouth syndrome (BMS), its pathophysiological mechanisms, accurate new diagnostic methods and evidence-based treatment options, and to describe novel lines for future research regarding aetiology, pathophysiology, and new therapeutic strategies. Description Primary BMS is a chronic neuropathic intraoral pain condition that despite typical symptoms lacks clear clinical signs of neuropathic involvement. With advanced diagnostic methods, such as quantitative sensory testing of small somatosensory and taste afferents, neurophysiological recordings of the trigeminal system, and peripheral nerve blocks, most BMS patients can be classified into the peripheral or central type of neuropathic pain. These two types differ regarding pathophysiological mechanisms, efficacy of available treatments, and psychiatric comorbidity. The two types may overlap in individual patients. BMS is most frequent in postmenopausal women, with general population prevalence of around 1%. Treatment of BMS is difficult; best evidence exists for efficacy of topical and systemic clonazepam. Hormonal substitution, dopaminergic medications, and therapeutic non-invasive neuromodulation may provide efficient mechanism-based treatments for BMS in the future. Conclusion We present a novel comprehensive hypothesis of primary BMS, gathering the hormonal, neuropathic, and genetic factors presumably required in the genesis of the condition. This will aid in future research on pathophysiology and risk factors of BMS, and boost treatment trials taking into account individual mechanism profiles and subgroup-clusters.

Menopause. 2017 May 29. doi: 10.1097/GME.0000000000000884. [Epub ahead of print]

Does obesity increase the risk of hot flashes among midlife women? A population-based study.

Saccomani S, Lui-Filho JF, Juliato CR, Gabiatti JR, Pedro AO, Costa-Paiva L.

OBJECTIVE: To evaluate the association between vasomotor symptoms and obesity in climacteric women. METHODS:

We conducted a cross-sectional population-based study of 749 women aged 45 to 60 years. The dependent variable was intensity of menopausal symptoms evaluated by the menopause rating scale questionnaire. Independent variables were sociodemographic and clinical characteristics, and obesity evaluated by body mass index. RESULTS: There was no significant difference in the majority of clinical and sociodemographic characteristics between the body mass index groups. Obese women had less physical activity (P=0.019) and a higher prevalence of hypertension (P<0.001), diabetes (P=0.002), urinary incontinence (P<0.001), and urge incontinence (P=0.0006). The total mean menopause rating scale score was 9.7. Scores for hot flashes increased progressively and were higher for participants with body mass index greater than 30kg/m (P=0.027). Joint and muscle pain scores also increased with increased body mass index (P<0.001). Regarding urogenital symptoms, there was a significant difference in urinary problems only, which were more intense in obese women (body mass index >30kg/m) (P<0.0001). There was no significant difference in any psychological symptoms on the menopause rating scale. Factors associated with hot flash scores were higher body mass index, presence of urinary urgency, and vaginal dryness. CONCLUSIONS: We found that menopausal symptoms, including vasomotor, joint, and urinary symptoms, were related to obesity. Hot flashes were associated with higher body mass index, urinary urgency, and vaginal dryness. Understanding this relationship may contribute to the development of healthcare strategies aimed at minimizing the impact of obesity on several health issues of climacteric women.

Osteoporos Int. 2017 May 29. doi: 10.1007/s00198-017-4081-5. [Epub ahead of print]

Association of adiposity indices with bone density and bone turnover in the Chinese population.

Wang J, Yan D, Hou X, Chen P, Sun Q, Bao Y, Hu C, Zhang Z, Jia W.

INTRODUCTION: Obesity is highly associated with osteoporosis, but the effect of adipose tissue on bone is contradictory. Our study aimed to assess the associations of adiposity indices with bone mineral density (BMD) and bone turnover markers (BTMs) in the Chinese population. METHODS: Our study recruited 5215 participants from the Shanghai area, evaluated related anthropometric and biochemical traits in all participants, tested serum BTMs, calculated fat distribution using magnetic resonance imaging (MRI) images and image analysis software, and tested BMD with dual-energy X-ray absorptiometry. RESULTS: When controlled for age, all adiposity indices were positively correlated with BMD of all sites for both genders. As for the stepwise regression analysis, body mass index (BMI), fat mass, and lean mass were protective for BMD in both genders. However, subcutaneous fat area (SFA) was detrimental for BMD of the L1-4 and femoral neck (β ± SE -0.0742 ± 0.0174; p = 2.11E-05; β ± SE -0.0612 ± 0.0147; p = 3.07E-05). Adiposity indices showed a negative correlation with BTMs adjusting for age, especially with osteocalcin. In the stepwise regression analysis, fat mass was negatively correlated with osteocalcin (β ± SE -8.8712 ± 1.4902; p = 4.17E-09) and lean mass showed a negative correlation with N-terminal procollagen of type I collagen (PINP) for males (β ± SE -0.3169 ± 0.0917; p = 0.0006). In females, BMI and visceral fat area (VFA) were all negatively associated with osteocalcin (β ± SE -0.4423 ± 0.0663; p = 2.85E-11; β ± SE -7.1982 ± 1.1094; p = 9.95E-11), while SFA showed a positive correlation with osteocalcin (β ± SE: 5.5993 ± 1.1753; p = 1.98E-06). CONCLUSION: BMI, fat mass, and lean mass are proved to be beneficial for BMD in both males and postmenopausal females. SFA is negatively associated with BMD and positively correlated with os**teo**calcin in postmenopausal females.