

#### Selección de Resúmenes de Menopausia

Semana del 18 a 24 de septiembre, 2024 María Soledad Vallejo. Obstetricia Ginecología. Hospital Clínico. Universidad de Chile

# J Nutr Health Aging. 2024 Sep 21;28(11):100368. doi: 10.1016/j.jnha.2024.100368. Online ahead of print. Osteosarcopenia predicts greater risk of functional disability than sarcopenia: a longitudinal analysis of FraDySMex cohort study

Oscar Rosas-Carrasco, Betty Manrique-Espinoza, Juan Carlos López-Alvarenga, Beatriz Mena-Montes, et al. Objectives: Aging involves significant changes in body composition, marked by declines in muscle mass and bone mineral density alongside an increase in fat mass. Sarcopenia is characterized by low strength and muscle mass, and osteosarcopenia is the coexistence of sarcopenia and osteopenia/osteoporosis. Physiologically, there is a crosstalk between muscle and bone tissues mediated by several pathways. Both, sarcopenia and osteosarcopenia, have been related with adverse outcomes such as functional disability. However, there is a lack of longitudinal studies. Therefore, this study aimed to assess whether sarcopenia and osteosarcopenia phenotypes increased the risk of functional disability in a longitudinal cohort of community-dwelling adults. Design: This study constitutes a secondary longitudinal analysis of data derived from the prospective cohort FraDvSMex (Frailty, Dynapenia, and Sarcopenia in Mexican adults). Setting and participants: FraDySMex is conducted in community-dwelling adults aged 50 years or older living in Mexico City. Data from 2014 to 2015 was considered as baseline evaluation, and the 2019 wave was the follow-up evaluation. Individuals with complete baseline and follow-up evaluations were included in the analysis. Measurements: Sarcopenia diagnosis adhered to the FNIH criteria, while osteopenia/osteoporosis classification followed WHO guidelines. Osteosarcopenia was defined as the concurrent presence of sarcopenia and osteopenia/osteoporosis. Functional disability was identified by the Lawton Instrumental Activities of Daily Living (IADL) Scale. Adjusted mixed-effects logistic regression models were estimated to evaluate the effect of body composition phenotype on the risk of functional disability. Results: The final sample included 320 adults with complete longitudinal data. The majority of were women (83.4%) and had 7-12 years of education (48.4%). At the baseline evaluation, 50.9% aged 50-70. The osteosarcopenia phenotype was associated with a higher risk of functional disability (OR: 2.17, p = 0.042) compared with the no osteopenia/sarcopenia group. Conversely, sarcopenia (OR: 1.50, p = 0.448)and osteopenia/osteoporosis (OR: 1.50, p = 0.185) phenotypes were not associated with functional disability. Conclusions: Our study underscores that osteosarcopenia significantly increased the risk of functional disability, particularly in terms of Instrumental Activities of Daily Living (IADL). These results emphasize the importance of screening for sarcopenia, osteopenia/osteoporosis, and osteosarcopenia across various clinical settings. Early detection and intervention hold promise for averting functional disability and mitigating associated adverse outcomes in adults.

### Eur J Neurosci. 2024 Sep 19. doi: 10.1111/ejn.16512. Online ahead of print. Evidence-based neuroprotective potential of nonfeminizing estrogens: In vitro and in vivo studies

Seema Bansal 1 2, Rajan Swami 3, Nitin Bansal 4, Rishabh Chaudhary 2, Saniya Mahendiratta 1, et al. Menopause weakens the brain's structural integrity and increases its susceptibility to a range of degenerative and mental illnesses.  $17\beta$  estradiol ( $17\beta E2$ ) exhibits potent neuroprotective properties. Exogenous estrogen supplementation provides neuroprotection, but the findings presented by the Million Women Study (MWS) and the Women's Health Initiative (WHI), as well as the increased risk of endometrial cancer, breast cancer and venous thromboembolism associated with estrogen use, have cast doubt on its clinical use for neurological disorders. Thus, the objective of our review article is to compile all in vitro and in vivo studies conducted till date demonstrating the neuroprotective potential of nonfeminizing estrogens. This objective has been achieved by gathering various research and review manuscripts from different records such as PubMed, Embase, Scopus, Google Scholar, Web of Science and OVID, using different terms like 'estrogen deficiency,  $17\beta$  estradiol, non-feminising estrogens, and brain disorder'. However, recent evidence has revealed the contribution of numerous non-estrogen receptor-dependent pathways in neuroprotective effects of estrogen. In conclusion, synthetic nonfeminizing estrogens that have little or no ER binding but are equally powerful (and in some cases more potent) in delivering neuroprotection are emerging as viable and potential alternatives.

#### Can J Cardiol. 2024 Jul 8:S0828-282X(24)00402-1. doi: 10.1016/j.cjca.2024.05.012. Online ahead of print. Impact of Aromatase Inhibitors Treatment Duration on Coronary Artery Calcification in Postoperative Patients With Breast Cancer

Yu Hiasa 1, Akinori Higaki 2, Yoshiaki Kamei 3, Tomoaki Nishikawa 1, Ryo Miyabe 1, Tomoki Fujisawa 1, et al. Background: Aromatase inhibitors (AIs) are the standard therapeutic approach for hormone receptor-positive postmenopausal breast cancer. However, there are concerns about increased cardiovascular risk due to their antioestrogenic effects. This study aimed to investigate the potential association between duration of AI treatment and the severity of coronary artery calcification (CAC). Methods: The study included outpatients who initiated adjuvant endocrine therapy with AIs for breast cancer from August 2010 to October 2022. CAC was quantified according to a visual ordinal scoring system. Patient characteristics were assessed based on the presence of CAC. Independent risk factors for elevated CAC scores were identified through a multivariable logistic regression model. Results: Among 357 patients, 44.8% exhibited CAC. No significant difference in AI treatment duration was observed between groups (1268 d finterquartile range (IOR) 725-1743 dl vs 1104 d [IOR 685-1683.25 dl; P = 0.236), Patients with CAC were characterised by higher age (63.06 y [56.81-68.78 y] vs 74.39 y [68.98-80.03 y]; P < 0.001), lower hemoglobin levels (g/dL: 13.20L [IQR 12.60-13.70L] vs 12.60 [IQR 11.60-13.43]; P < 0.001), and reduced estimated glomerular filtration rate (mL/min/1.73 m2: 72.00 [IQR 61.80-81.50] vs 62.80 [IQR 51.27-71.90]; P < 0.001) compared with those without CAC. The prevalences of hypertension, diabetes mellitus, and dyslipidemia were significantly higher in patients with CAC. No correlation was found between the duration of AI treatment and CAC score (R = -0.02; P = 0.78). Independent risk factors for CAC included higher age, lower hemoglobin levels, and the presence of hypertension and diabetes mellitus in postoperative patients with breast cancer. Conclusions: The duration of AI treatment does not exert a significant influence on CAC in postoperative patients with breast cancer.

### Zhonghua Er Bi Yan Hou Tou Jing Wai Ke Za Zhi. 2024 Sep 7;59(9):916-921. Preliminary analysis of risk factors of tinnitus related to female menopause

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Objective: To investigate the possible pathogenesis and possible risk factors of tinnitus related to female menopause. Methods: From April 2016 to October 2016, 59 female patients with menopausal syndrome were diagnosed in the menopause comprehensive management clinic. Tinnitus and menopause questionnaires were conducted, based on whether having tinnitus, those patients were divided into two groups: tinnitus group and no tinnitus group. Age, body mass index (BMI), Kupperman menopausal index (KMI) score, follicle-stimulating hormone (FSH) level of patients in the two groups were analyzed. Menopausal symptoms, related medical history and possible related factors of tinnitus were statistically analyzed. Results: A total of 59 cases were collected, 22 of which were accompanied by tinnitus. The incidence of idiopathic tinnitus was 35.1% (20/57) because 2 cases of thyroid related tinnitus with clear etiology were removed. Complete data were obtained from 17 of 20 patients with idiopathic tinnitus and 26 of 37 patients without tinnitus. Age, BMI, menopause KMI score, hormone level, menopause symptoms and possible factors related to tinnitus were statistically analyzed between the two groups, and the incidence of headache was statistically different between the two groups ( $\chi$ 2=9.098, P=0.003), but no other factors were statistically significant(P>0.05). The severity of insomnia and tinnitus were further analyzed ( $\chi$ 2=2.841, P=0.417), and there was no significant difference between the two groups. Conclusion: Headache history may be one of the high risk factors for the occurrence of menopausal tinnitus.

## J Psychosom Res. 2024 Aug 6:187:111881. doi: 10.1016/j.jpsychores.2024.111881. Online ahead of print. Association of Female Reproductive Factors with depression and suicidal ideation in postmenopausal women: Evidence from NHANES 2007-2018

Shujie Zhang 1, Yanan Zhang 2, Junhuan Mao 3

Objective: This cross-sectional research aimed to examine how reproductive factors influence depression and suicidal ideation among postmenopausal women. Methods: Data from the 2007 to 2018 US National Health and Nutrition Examination Survey were analyzed for this study. The Patient Health Questionnaire (PHQ-9) was adopted to measure depression and suicidal ideation in the participants .Results: Out of 3076 participants, 9.5% (348/3076) experienced depression, and 3.4% (128/3076) reported suicidal ideation. Following the adjustment for confounding factors, premature menopause (OR = 1.81, 95% CI: 1.03-3.15) was significantly associated with an increased risk of depression. Moreover, postmenopausal women with a higher number of pregnancies exhibited a greater risk of

depression (OR = 1.29, 95% CI: 1.09-1.53; P < 0.001). Conversely, a longer reproductive lifespan (OR = 0.96, 95% CI: 0.93-0.99) and a higher number of livebirths (OR = 0.68, 95% CI: 0.54-0.86; P < 0.001) were linked to a decreased risk of depression. Furthermore, the use of oral contraceptives (OR = 0.52, 95% CI: 0.28-0.97; P = 0.021) was significantly associated with a decreased likelihood of experiencing suicidal ideation, while the number of livebirths (OR = 0.68, 95% CI: 0.48-0.97; P = 0.018) exhibited a negative correlation with suicidal ideation. Conclusion: Our results indicate that reproductive factors are significantly associated with the risk of depression and suicidal ideation in postmenopausal women. Further longitudinal studies with repeated measures of depression are necessary to establish causal relationships.

#### Eur J Endocrinol. 2024 Aug 30;191(3):361-369. doi: 10.1093/ejendo/lvae111.

### Impact of antiresorptive agents on mortality risk in postmenopausal women with osteoporosis: insights from a nationwide cohort study

Kyoung Jin Kim 1, Seong Hee Ahn 2, So Young Park 3, Jimi Choi 1, et al; KSBMR Epidemiology Study Group Importance: Osteoporosis-related fractures are associated with increased mortality risk among postmenopausal women, yet the impact of antiosteoporotic medications on mortality is not fully understood. Objective: This study evaluates the effect of antiresorptive agents (ARs) on mortality risk in postmenopausal women with osteoporosis. Design: This is a nationwide cohort study using data from the National Screening Program for Transitional Ages (2008-2017). Se tting: Data were derived from a national cohort of postmenopausal women in South Korea. Participants: This study included 117 871 postmenopausal women diagnosed with osteoporosis. Of them, 15 895 patients who used ARs, such as bisphosphonates or selective estrogen receptor modulators, for at least 1 year were matched 1:1 with nonusers using propensity scores. Exposures: Exposure to ARs for at least 1 year was compared with no AR use. Main outcomes and measure: Mortality outcomes were assessed using multivariable Cox proportional hazard regression models, focusing on all-cause mortality and cause-specific mortality, particularly cardiovascular disease (CVD) and injury-/fracture-related deaths, Results: In AR users, there were 102 deaths (mortality rate 1.41 per 1000 person-years). compared with 221 deaths in non-users (mortality rate 3.14 per 1000 person-years), yielding a hazard ratio (HR) of 0.43 (95% CI, 0.34-0.54). Antiresorptive agent users showed a 52% reduction in CVD mortality risk (HR, 0.48; 95% CI, 0.34-0.69) and a 54% reduction in injury-/fracture-related mortality risk (HR, 0.46; 95% CI, 0.27-0.76). The analysis indicated a consistent decrease in all-cause and CVD mortality risks with longer durations of AR use. Conclusions and relevance: The use of ARs in postmenopausal women with osteoporosis is associated with significantly lower risks of all-cause mortality, especially from cardiovascular events and fractures. The mortality reduction benefits appear to be enhanced with prolonged AR therapy, highlighting the potential importance of sustained treatment in this population.

# Arch Womens Ment Health. 2024 Sep 16. doi: 10.1007/s00737-024-01513-6. Online ahead of print. Effect of transdermal testosterone therapy on mood and cognitive symptoms in peri- and postmenopausal women: a pilot study

Sarah Glynne 1, Aini Kamal 2, Ahmed M Kamel 3, Dan Reisel 2 4, Louise Newson 2

Purpose: The purpose of this study was to assess the impact of testosterone therapy on mood and cognitive symptoms in perimenopausal and postmenopausal women. Methods: A retrospective cohort study undertaken in a UK specialist menopause clinic. 510 women using hormone replacement therapy (HRT) with persistent low libido, cognitive and negative mood symptoms were treated with testosterone cream or gel for 4 months. A modified version of the Greene Climacteric Scale was used to measure self-reported symptom frequency and severity at baseline and 4 months after initiating treatment. Results: All nine cognitive and mood symptoms significantly improved across the study period. Mood improved more than cognition (47% of women reported an improvement in mood vs. 39% reported an improvement in cognition; 34% vs. 22% decrease in mean symptom scores, respectively). Regarding libido, 52% of women reported an improvement; mean symptom score decreased by 33%. Conclusion: Transdermal testosterone therapy for 4 months was associated with significant improvements in mood and cognition. Further research including randomised clinical trials are needed to establish the long-term efficacy and safety of testosterone for the treatment of menopausal cognitive and psychological symptoms.