



Selección de Resúmenes de Menopausia

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Relationship Between Sarcopenia, Obesity, Osteoporosis, and Cardiometabolic Health Conditions and Physical Activity Levels in Korean Older Adults

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This study aimed to analyze the status of sarcopenia, obesity, osteoporosis, and cardiometabolic disease according to the level of physical activity (PA) among elderly people in Korea. Among the data obtained from the National Health and Nutrition Survey (2008-2011), we analyzed the data of a total of 3,573 Korean elderly people over 65 years of age who were surveyed for dual X-ray absorptiometry (DXA) and PA. Higher levels of PA were associated with a lower prevalence of cardiometabolic disease ($\chi^2 = 33.865$, $p < 0.001$), osteoporosis ($\chi^2 = 94.198$, $p < 0.001$), sarcopenia, obesity, and sarcopenic obesity ($\chi^2 = 71.828$, $p < 0.001$). Above moderate-active PA was associated with lower body weight ($p < 0.001$), body fat mass ($p < 0.001$), and percent body fat ($p < 0.001$), and higher free-fat mass ($p < 0.001$) and appendicular skeletal muscle mass (ASM) ($p < 0.001$) than in low-active PA. In addition, when high-active is the risk factors of cardiometabolic were lower in waist circumference ($p = 0.001$), total cholesterol (TC) ($p = 0.015$), and triglyceride (TG) ($p < 0.001$) than low- and moderate-active PA, and higher in high-density lipoprotein cholesterol (HDL-C) ($p < 0.001$). The prevalence of cardiometabolic diseases was significantly decreased in high-active PA (odds ratio (OR) 0.60, 95% confidence interval (CI) 0.50-0.71); waist circumference (OR 0.85, 95% CI, 0.73-0.99; OR 0.59, 95% CI, 0.50-0.70) and HDL-C (OR 0.76, 95% CI, 0.65-0.88; OR 0.56, 95% CI, 0.47-0.67) significantly improved in moderate- and high-active PA, respectively, and TG (0.67 95% CI, 0.55-0.80) significantly improved in high-active PA. Osteoporosis (OR 0.62, 95% CI, 0.53-0.74; OR 0.46, 95% CI, 0.38-0.55) and sarcopenia (OR 0.77, 95% CI, 0.60-0.98; OR 0.73, 95% CI, 0.57-0.93) were significantly improved in moderate- and high-active PA, respectively. The incidence of obesity (OR 0.47, 95% CI, 0.39-0.57) and sarcopenic obesity (OR 0.47, 95% CI, 0.30-0.75) were significantly decreased in high-active PA. Therefore, we verified a lower prevalence of sarcopenia, osteoporosis, obesity, and cardiac metabolic disease in Korean elderly with more active PA. This suggests that more active PA maybe reduce the prevalence of sarcopenia, osteoporosis, obesity, and cardiometabolic diseases in older adults.

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Cognitive decline is associated with an accelerated rate of bone loss and increased fracture risk in women: a prospective study from the Canadian Multicentre Osteoporosis Study

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Cognitive decline and osteoporosis often coexist and some evidence suggests a causal link. However, there are no data on the longitudinal relationship between cognitive decline, bone loss and fracture risk, independent of aging. This study aimed to determine the association between: (i) cognitive decline and bone loss; and (ii) clinically significant cognitive decline (≥ 3 points) on Mini Mental State Examination (MMSE) over the first 5 years and subsequent fracture risk over the following 10 years. A total of 1741 women and 620 men aged ≥ 65 years from the population-based Canadian Multicentre Osteoporosis Study were followed from 1997 to 2013. Association between cognitive decline and (i) bone loss was estimated using mixed-effects models; and (ii) fracture risk was estimated using adjusted Cox models. Over 95% of participants had normal cognition at baseline (MMSE ≥ 24). The annual % change in MMSE was similar for both genders (women -0.33, interquartile range [IQR] -0.70 to +0.00; and men -0.34, IQR: -0.99 to 0.01). After multivariable adjustment, cognitive decline was associated with bone loss in women (6.5%; 95% confidence interval [CI], 3.2% to 9.9% for each percent decline in MMSE from baseline) but not men. Approximately 13% of participants experienced significant cognitive decline by year 5. In women, fracture risk was increased significantly (multivariable hazard ratio [HR], 1.61; 95% CI, 1.11 to 2.34). There were too few men to analyze. There was a significant association between cognitive decline and both bone loss and fracture risk, independent of aging, in women. Further studies are needed to determine mechanisms that link these common conditions

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The impact of ageing and menopause in women with polycystic ovary syndrome

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Polycystic ovary syndrome (PCOS) is a common hormonal, metabolic and reproductive disorder. Women with PCOS at reproductive age have increased risk and prevalence of prediabetes and diabetes and have multiple risk factors for cardiometabolic disease and other comorbidities such as obstructive sleep apnoea, endometrial cancer and mood disorders, which contribute to the overall health burden of the syndrome. However, little is known about the impact of PCOS on long-term health in ageing women. In this review, we aimed to give an updated overview regarding the long-term health outcomes of PCOS and their clinical implications in peri- and postmenopause. The PCOS phenotype ameliorates with ageing and limited available data suggest that there is no further deterioration in cardiometabolic profile in women with PCOS after menopause. Accordingly, the risk of cardiovascular disease in ageing women with PCOS seems to be no different from those without PCOS and lower than previously anticipated based on their risk during reproductive years. Regarding other comorbidities including sleep apnoea, mood disorders and endometrial cancer, it is difficult to determine the true risk in older women with PCOS due to the confounding factors and lack of long-term cohort studies. Large, prospective studies on community-based and well-phenotyped PCOS cohorts with extended follow-up into late menopause are needed to confirm these findings.

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Changes in abdominal subcutaneous adipose tissue phenotype following menopause is associated with increased visceral fat mass

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Menopause is associated with a redistribution of adipose tissue towards central adiposity, known to cause insulin resistance. In this cross-sectional study of 33 women between 45 and 60 years, we assessed adipose tissue inflammation and morphology in subcutaneous adipose tissue (SAT) and visceral adipose tissue (VAT) across menopause and related this to menopausal differences in adipose tissue distribution and insulin resistance. We collected paired SAT and VAT biopsies from all women and combined this with anthropometric measurements and estimated whole-body insulin sensitivity. We found that menopause was associated with changes in adipose tissue phenotype related to metabolic dysfunction. In SAT, postmenopausal women showed adipocyte hypertrophy, increased inflammation, hypoxia and fibrosis. The postmenopausal changes in SAT was associated with increased visceral fat accumulation. In VAT, menopause was associated with adipocyte hypertrophy, immune cell infiltration and fibrosis. The postmenopausal changes in VAT phenotype was associated with decreased insulin sensitivity. Based on these findings we suggest, that menopause is associated with changes in adipose tissue phenotype related to metabolic dysfunction in both SAT and VAT. Whereas increased SAT inflammation in the context of menopause is associated with VAT accumulation, VAT morphology is related to insulin resistance.

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Different cutoff points to diagnose low muscle mass and prediction of osteoporosis in postmenopausal women

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Objective: This study aimed to verify which of the different cutoff points of low muscle mass (LMM) based on appendicular lean mass (ALM) is associated with osteoporosis in postmenopausal women (PMW). Methods: Cross-sectional study. PMW (n = 355) were classified for the presence of osteoporosis (score <-2.5 standard deviations) at the femoral neck and lumbar spine and LMM (three cutoff points: ALM < 15 kg; ALM/height² [ALM index] <5.67 kg/m² and ratio between ALM and body mass index [ALMBMI] <0.512). Results: After adjustments for confounding factors, binary logistic regression showed that ALM and ALM index were associated with osteoporosis at the lumbar spine (odds ratio [OR] = 5.3 [95% CI: 2.3-12.5] and OR = 2.5 [95% CI: 1.0-6.2], respectively) and only ALM was associated with osteoporosis at the femoral neck (OR = 16.1 [95% CI: 4.1-62.5]). When women were classified as having osteoporosis in at least one site, only ALM was associated with osteoporosis (OR = 7.7 [95% CI: 3.3-15.6]). There was no association between ALMBMI and osteoporosis. The predictive value of ALM for osteoporosis decreased after BMI or height were included as a covariate in the model. Conclusion: Absolute ALM (<15 kg) seems to be the most suitable for predicting osteoporosis based on LMM in PMW.

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Statin therapy in midlife women

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The menopause transition is associated with adverse changes to the lipid profile. Although there are no specific treatment guidelines for women, current evidence supports the use of statin therapy in women with 1) established clinical atherosclerotic cardiovascular disease (ASCVD); 2) primary hypercholesterolemia, with low-density lipoprotein cholesterol of 190 mg/dL (4.9 mmol/L) or higher; 3) diabetes mellitus regardless of ASCVD risk category (ages 40-75 y); and 4) for primary prevention of ASCVD in women at high risk (10-y risk, $\geq 20\%$) or intermediate risk (10-y risk, $\geq 7.5-20\%$) with the presence of guideline-derived risk enhancers (age 40-75 y) such as premature menopause or a history of preeclampsia.

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Differences in menopausal symptoms and female sexual function by region and ethnicity in West Texas and Central Arizona: a cross-sectional survey

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Objective: To evaluate menopausal symptoms and sexual problems in Hispanic and non-Hispanic women in two Southwest areas. Methods: An anonymous survey including the Green Climacteric Scale (GCS), Female Sexual Function Index (FSFI), and demographics was distributed to English and Spanish-speaking women age 40 to 60 in Scottsdale, Arizona, and West Texas. FSFI for sexually active women and GCS scores for the Hispanic and non-Hispanic women in Texas were analyzed with multivariable analysis and compared between Texas and Arizona for Non-Hispanic participants. Results: Predominantly non-Hispanic women (70%), average age 51.5 (SD = 7.25) completed questionnaires (199 West Texas, 163 Scottsdale). A majority of sexually active women (88%) were found to be at risk of sexual dysfunction. Within the Texas cohort, GCS score was estimated to be 3.49 points lower (less symptoms) in Hispanic versus non-Hispanic participants [95% CI -6.58 to -0.40, $P = 0.03$], and FSFI score was estimated to be 2.31 points lower (more symptoms) in Hispanic versus non-Hispanic participants [95% CI -4.49 to -0.14, $P = 0.04$]. Among non-Hispanic women, GCS scores were lower (less symptoms) in Texas versus Arizona by 10.25 points [95% CI -14.83 to -5.66, $P < 0.01$], while FSFI scores were higher overall (less symptoms) in Texas by 3.65 points [95% CI 0.53-6.77], $P = 0.02$]. All FSFI and GCS scores were adjusted for multiple variables. Conclusions: In a group of menopausal women from the Southwest, most reported symptoms were consistent with FSD, and the degree of sexual problems appeared to be greater in the Hispanic participants from Texas.

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Use of aromatase inhibitors in patients with breast cancer is associated with deterioration of bone microarchitecture and density

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Objective: To evaluate changes in bone density and architecture in postmenopausal women with breast cancer (BC) and use of aromatase inhibitor (AI). Methods: Thirty-four postmenopausal women with BC, without bone metastasis, renal function impairment and who were not receiving bone-active drugs were selected from a population of 523 outpatients treated for BC. According to the presence of hormonal receptors, HER2 and Ki67, seventeen had positive hormonal receptors and received anastrozole (AI group), and seventeen were triple-negative receptors (non-AI group), previously treated with chemotherapy. Areal bone mineral density (aBMD) and vertebral fracture assessment (VFA) analyses were performed by DXA; vBMD and bone microarchitecture were evaluated by HR-pQCT. Fracture risk was estimated using the FRAX tool. Results: No patient referred previous low-impact fracture, and VFA detected one moderate vertebral fracture in a non-AI patient. AI patients showed lower aBMD and BMD T-scores at the hip and 33% radius and a higher proportion of osteoporosis diagnosis on DXA (47%) vs non-AI (17.6%). AI group had significantly lower values for vBMD at the entire, cortical and trabecular bone compartments, cortical and trabecular thickness and BV/TV. They also had a higher risk for major fractures and for hip fractures estimated by FRAX. Several HR-pQCT parameters evaluated at distal radius and distal tibia were significantly associated with fracture risk. Conclusion: AI is associated with alterations in bone density and microarchitecture of both the cortical and trabecular compartments. These findings explain the overall increase in fracture risk in this specific population.

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Global consensus recommendations on menopause in the workplace: A European Menopause and Andropause Society (EMAS) position statement

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Introduction: Worldwide, there are 657 million women aged 45-59 and around half contribute to the labor force during their menopausal years. There is a diversity of experience of menopause in the workplace. It is shaped not only by menopausal symptoms and context but also by the workplace environment. It affects quality of life, engagement, performance, motivation and relations with employers. **Aim:** To provide recommendations for employers, managers, healthcare professionals and women to make the workplace environment more menopause supportive, and to improve women's wellbeing and their ability to remain in work. **Materials and methods:** Literature review and consensus of expert opinion. **Summary recommendations:** Workplace health and wellbeing frameworks and policies should incorporate menopausal health as part of the wider context of gender and age equality and reproductive and post-reproductive health. Workplaces should create an open, inclusive and supportive culture regarding menopause, involving, if available, occupational health professionals and human resource managers working together. Women should not be discriminated against, marginalized or dismissed because of menopausal symptoms. Health and allied health professionals should recognize that, for some women, menopausal symptoms can adversely affect the ability to work, which can lead to reduction of working hours, underemployment or unemployment, and consequently financial insecurity in later life.