Selección de Resúmenes de Menopausia

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Defining sarcopenia in terms of skeletal health.

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PURPOSE: Various sarcopenia definitions and cutoff points result in mixed skeletal health results. Here, we aimed to determine a suitable definition and elucidate the cutoff values of sarcopenic indices for identifying fracture risk in a community-dwelling Korean cohort. METHODS: In an Ansung cohort study (2009-2010), we included 1201 men aged > 50 years and 1627 postmenopausal women with a median age of 64 years. Body composition and bone mineral density were derived on dual-energy X-ray absorptiometry. Grip strength was measured using a hand dynamometer. Fragility fractures included the history of osteoporotic fractures using self-reported questionnaires. RESULTS: Among appendicular lean mass (ALM)/body mass index (BMI), ALM/height2, and ALM/weight, ALM/height2 for men and ALM/BMI for women significantly predicted fragility fractures. On receiver operating characteristic curve analysis, the cutoff values of ALM/height2 in men and ALM/BMI in women were 7.69 kg/m2, and 0.57, respectively. The optimal grip strength values were 31 kg in men and 19 kg in women. The odds ratios of low ALM/height2 (95% confidence interval) and weak grip strength for fragility fracture were 1.95 (1.03-3.68) and 2.05 (1.01-4.18), respectively, in men after covariate adjustment. The combination of low ALM/height2 and weak grip strength increased fragility fractures 2.16-fold in men. Only the combination of low ALM/BMI and grip strength increased the fracture risk by 1.76-fold in women. CONCLUSIONS: In men, low ALM/height2 or grip strength played a role in fragility fractures. In women, only the combination of low ALM/BMI and grip strength had discriminatory power for fragility fractures.

EFORT Open Rev. 2018 Aug 16;3(8):449-460. doi: 10.1302/2058-5241.3.160088. eCollection 2018 Aug.

Correlation between skin and bone parameters in women with postmenopausal osteoporosis: A systematic review.

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Skin and bone share similarities in terms of biochemical composition.Some authors have hypothesized that their properties could evolve concomitantly with age, allowing the estimation of the parameters of one from those of the other.We performed a systematic review of studies reporting the correlation between skin and bone parameters in women with postmenopausal osteoporosis.Fourteen studies - including 1974 patients - were included in the review.Three of these studies included two groups of participants - osteoporotic and non-osteoporotic - in order to compare skin parameters between them: two studies found a significant difference between the two groups and one did not.Eleven of these studies included one population of interest and compared its skin and bone parameters in a continuous manner: eight studies compared dermal thickness to bone mineral density (seven found a significant correlation [R = 0.19-0.486] and one did not); two studies compared skin elasticity to bone mineral density (both found a significant correlation [R = 0.44-0.57); and one study compared skin collagen to bone mineral density and found a significant correlation (R = 0.587).It can be assumed that the estimation of skin alterations from ageing could help in estimating concomitant bone alterations.

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Five-year exposure to PM2.5 and ozone and subclinical atherosclerosis in late midlife women: The Study of Women's Health Across the Nation.

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INTRODUCTION: Effects of more than one-year exposure to air pollution on atherosclerosis is seldom studied. This paper aims to examine the association between five-year exposure to particulate matter ≤2.5 μm (PM2.5), ozone (O3) and atherosclerosis observed about seven years later in late midlife women. MATERIAL AND METHODS: This study was conducted among 1188 women of the Study of Women's Health Across the Nation (SWAN) from five sites, Detroit, MI; Oakland, CA; Pittsburgh, PA; Chicago, IL; and Newark, NJ, with available data on both air

pollutant exposure and carotid ultrasound scans. Five-year mean annualized exposure levels of two air pollutants, PM2.5 and ozone (O3), were collected during 5 SWAN visits (1999-2005) from monitors 20 km within the participant's residential address. Linear regression models were used to estimate the association of prior five-year mean annualized exposure to PM2.5 and O3 with common carotid intima-media thickness (cIMT) and inter-adventitial diameter (IAD) examined approximately seven years later (2009-2013). Logistic and multinomial logistic regressions were applied to assess the associations of air pollutants with plaque presence and plaque index, respectively. RESULTS: At time of carotid ultrasound scan, women were on average 59.6 (±2.7) years old and a majority was postmenopausal (88.4%). The women were White (48.4%), Black (31.2%), Chinese (13.3%) and Hispanic (7.1%). A 1 μg/m3 higher 5-year mean annualized exposure to PM2.5 was associated with an 8.0 μm (95% CI: 1.0-15.1) greater maximum cIMT at a later mid-life, adjusting for cardiovascular disease risk factors; but was only related to IAD after adjusting for site. No association was found between either pollutant and plaque presence or plaque index. CONCLUSIONS: Long-term exposure to PM2.5 may contribute to elevated risk of atherosclerosis in the post-menopausal period.

BMC Womens Health. 2018 Sep 20;18(1):153. doi: 10.1186/s12905-018-0648-3.

Flow mediated vasodilation compared with carotid intima media thickness in the evaluation of early cardiovascular damage in menopausal women and the influence of biological and psychosocial factors.

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BACKGROUND: Women after menopause increase risk for cardiovascular disease and several factors may be related. The purpose was to study biological and psychosocial factors associated with early cardiovascular damage in pre- and postmenopausal women, assessed with carotid intima-media thickness vs flow-mediated dilatation. METHODS: Women 45 to 57 years old were grouped in the pre- (n = 60), early (n = 58) and late post-menopause (n = 59). Anthropometric, metabolic and hormonal data were registered, as well as measures of depression, anxiety, submission, perceived stress, and sleep alterations. Heart Rate Variability was recorded to obtain the information regarding sympathovagal balance. Carotid intima-media thickness and flow-mediated dilatation were assessed by ultrasound. Two-way ANOVA and multiple regression model were used. RESULTS: At late postmenopause, the carotid intima-media was thicker ($p < 0.001$) and flow-mediated dilatation decreased ($p < 0.001$). Carotid intima-media thickness was associated positively with age ($p < 0.001$), submission score ($p = 0.029$), follicle stimulating hormone levels ($p < 0.001$), and body mass index ($p = 0.009$). Flow-mediated dilatation was associated only with age ($p < 0.001$). Regarding heart rate variability, the time domain pNN50 measurement was higher in premenopausal women ($p = 0.001$), Low Frequency (LF) was higher in the two groups of postmenopausal ($p = 0.001$) and High Frequency (HF) higher in the early postmenopausal women ($p = 0.042$). CONCLUSIONS: Under our conditions carotid intima-media thickness had higher predictive value for early cardiovascular damage at menopause. The finding of the association of the submission score, indicates de influence of stress on vascular damage.

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Low pretreatment serum concentration of vitamin D at breast cancer diagnosis in postmenopausal women.

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OBJECTIVE: The aim of the study was to evaluate the rate of and risk factors for low pretreatment vitamin D (VitD) levels in postmenopausal breast cancer (BC) women, compared with postmenopausal women without BC. METHODS: A cross-sectional clinical study was conducted to compare 209 women with BC (case group) to 418 women without BC (control group), age range: 45 to 75 years. The case group consisted of women diagnosed with BC, amenorrhea ≥12 months, aged ≥45 years, without use of medication or clinical conditions that might interfere with VitD levels. The control group consisted of women with amenorrhea ≥12 months, aged ≥45 years, without BC. The groups were matched for age and time since menopause, at a case: control ratio of 1:2. Serum 25-hydroxyvitamin-D [25(OH)D] concentration was measured in all women 10 to 20 days after BC diagnosis and before the proposed treatment. Serum levels ≥30 ng/mL were defined as sufficient. The Student's t test or gamma distribution, χ test, and logistic regression (odds ratio, OR) were used for statistical analysis. RESULTS: The BC group had a higher body mass index (BMI) and higher percentage of obesity than the control group (57.4% vs 40.2%, $P < 0.0001$). In addition, rates of insufficient (20-29 ng/mL) and deficient (<20 ng/mL) 25(OH)D levels were

higher in BC patients than in controls (55.6% vs 49.3%, P=0.039 and 26.2% vs 20.3%, P=0.018), respectively. In risk analysis (adjusted for age, time since menopause, and BMI), BC patients had a 1.5-fold higher risk of developing low VitD levels (OR=1.52, 95% CI, 1.04-2.22, P=0.029) than women without BC. CONCLUSIONS: Postmenopausal women had an increased risk of VitD deficiency at the time of BC diagnosis, associated with a higher rate of obesity, than women of the same age group without cancer.

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The association between estradiol levels and cognitive function in postmenopausal women.

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Background: Levels of estradiol decreases as women arrive the menopausal transition and enter to a low, steady level during the early postmenopause. In addition, memory dysfunction are highly prevalent during this period. Objective: Our study was designed to determine whether endogenous levels of estradiol are related to cognitive function in postmenopausal. Materials and Methods: The cross-sectional study was conducted between November 2015 to February 2016 on 209 healthy postmenopausal women. The women filled out the Montreal Cognitive Assessment (MoCA) scale. Then, estradiol level was tested for association with cognitive function adjusted for factors supposed to confound this association. Results: The prevalence of cognitive dysfunction; MoCA points ≤26 in our participants was 62.7%, and mean±SD of estradiol level was 14.92±10.24pg/ml in participants with cognitive dysfunction in comparison with 21.67±14.92pg/ml in those with normal cognitive function (p<0.001). There were significant association between MoCA points with estradiol level (p<0.001) and educational status (p<0.001). Conclusion: Estradiol replacement therapy in postmenopausal women with low endogenous estradiol levels and decreased cognitive function might be necessary.

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Effects of sunlight exposure and vitamin D supplementation on vitamin D levels in postmenopausal women in rural Thailand: A randomized controlled trial.

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BACKGROUND: Despite the abundant sunlight in Thailand, vitamin D deficiency is common in premenopausal and postmenopausal Thai women. Sunlight exposure is a natural way to increase one's intake of vitamin D. However, limited research has been conducted regarding natural exposure to sunlight as a strategy to improve vitamin D status in postmenopausal women. OBJECTIVE: This study aimed to determine the effects of sunlight exposure compared with oral supplementation with vitamin D2 (weekly 20,000 IU) in combination with sunlight exposure on 25(OH)D levels. METHODS: A 12-week randomized controlled trial was conducted in 52 postmenopausal women, age 50-70 years. The participants were randomized to either the sunlight exposure group or the sunlight exposure with vitamin D supplementation group. Serum 25(OH)D concentration and parathyroid hormone (PTH) were measured using standard assays at baseline and 12 weeks. RESULTS: After 12 weeks, mean serum 25(OH)D had decreased from 32.3 to 29.7 ng/ml in the sunlight exposure group, but significantly increased in the combination group (from 29.9 to 32.4 ng/ml). At the end of the study, 25(OH)D levels were significantly higher in the sunlight exposure with vitamin D supplementation group compared with the sunlight exposure group. However, this difference was not observed in women aged >60 years. Serum PTH had decreased in both groups, but not to a significant extent. CONCLUSION: A combination of weekly vitamin D2 supplementation at a dose of 20,000 IU with sunlight exposure is more effective than sunlight exposure alone in postmenopausal Thai women. Sunlight exposure alone is not sufficient to maintain 25-hydroxyvitamin D levels in this setting.