

### Selección de Resúmenes de Menopausia

Semana del 22 a 28 de junio 2022 María Soledad Vallejo. Clínica Quilín. Universidad de Chile

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## Surprisingly few women with severe osteoporosis by bone densitometry undergo workup for secondary causes - a retrospective evaluation

K Nguyen 1, X Chen 1, T Hughes 1, H Hofflich 1, G N Woods 1, K C McCowen 1

We describe clinical features of women with extremely low bone density, and investigate secondary causes of osteoporosis. Our hypothesis was that this population would be enriched in identifiable causes of osteoporosis. We performed a retrospective review of medical records of all women seen at our university over 4 years with T-score on bone densitometry at/below -4 at any site. Historical and fracture details were abstracted. We considered a thorough work up to include Vitamin D, PTH, CBC, chemistry panel, cortisol, transglutaminase, myeloma screen, tryptase and 24-hour urine calcium. Results: 137 women were identified with T-score at/below -4. Percent identified as Asian was 26% (higher than local prevalence of 8%). Average BMI was 21.6 kg/m2. Clearly identifiable causes of osteoporosis were noted in 57% (inflammatory disorder, glucocorticoid or antacid exposure, prolonged immobilization and alcoholism were most prevalent). Of the remainder, full work up was performed only in 8%. Endocrine consultation and white race predicted thoroughness of secondary work-up. Conclusion: Fragility fractures, leanness and Asian race were common in women with very low T-score. However, few new causes were identified. Underlying etiology was either immediately evident or inadequately studied, especially in minorities.

#### Nutrients. 2022 Jun 18;14(12):2538. doi: 10.3390/nu14122538.

## Calcium Supplementation, Risk of Cardiovascular Diseases, and Mortality: A Real-World Study of the Korean National Health Insurance Service Data

Jae-Min Park 1 2, Bora Lee 3, Young-Sang Kim 4, Kyung-Won Hong 5, Yon Chul Park 6, Dong Hyeok Shin,et al. Few studies have investigated the effects of calcium supplementation on cardiovascular outcomes in individuals with low calcium intake in real-world settings. This study examined the association between calcium supplementation and cardiovascular outcomes in the Korean population in a real-world setting. This large retrospective cohort study included patients aged ≥45 years first prescribed calcium supplements in 2010. Age- and sex-matched controls were recruited among those who had no prescription for calcium supplements. Longitudinal data were collected on 31 December 2018. Kaplan-Meier estimation and Cox proportional hazard regression analysis were performed. The cumulative incidence of acute myocardial infarction, ischemic stroke, and death was significantly higher in the calcium supplementation group than in the control group (p < 0.05 by log-rank test). The calcium supplementation group had a significantly higher risk of myocardial infarction, ischemic stroke, and death than the control group. Compared to the control group, the hazard ratios (95% confidence intervals) of the incidence of myocardial infarction, stroke, and death in the supplementation group were 1.14 (1.03-1.27), 1.12 (1.05-1.20), and 1.40 (1.32-1.50), respectively, after adjusting for confounding variables. Considering the associated cardiovascular risk, calcium supplementation for osteoporosis treatment should be administered cautiously.

#### J Pers Med. 2022 Jun 9;12(6):944. doi: 10.3390/jpm12060944.

# Association of Serum 25-Hydroxyvitamin D Concentration with Breast Cancer Risk in Postmenopausal Women in the US

Vijay Ganji 1, Layan Sukik 1, Bushra Hoque 1, Linda Boutefnouchet 1, Zumin Shi 1

The association between serum 25-hydroxyvitamin D [25(OH)D] concentration and breast cancer risk in postmenopausal women is not well understood. The aim of this study was to investigate the association between serum 25(OH)D concentration and breast cancer in postmenopausal women in the United States using nationally representative sample surveys. We used the data from seven cycles of National Health and Nutrition Examination Surveys from 2001 to 2014. Participants were non-institutionalized postmenopausal women (n = 8108). In restricted cubic spline analysis, a significant, nonlinear, invert 'U' relationship was observed between serum 25(OH)D concentrations and breast cancer in postmenopausal women (p = 0.029). Overall, breast cancer risk was highest (OR =

1.5) between 70 nmol/L and 80 nmol/L of serum 25(OH)D concentration. Then after serum 25(OH)D 80 nmol/L concentration, the breast cancer risk declined. In multivariate-adjusted logistic regression, the risk of having breast cancer was significantly higher in serum 25(OH)D 75-<100 nmol/L category compared to the 25(OH)D &lt; 30 nmol/L category [OR and 95% CI: 2.4 (1.4-4.0)]. In conclusion, serum vitamin D concentrations  $\geq$  100 nmol/L are associated with reduced risk of breast cancer in postmenopausal women. Controlled trials are required to verify if serum 25(OH)D  $\geq$  100 nmol/L offers protection against breast cancer in postmenopausal women.

### Stroke. 2022 Jun 23;101161STROKEAHA121038659. doi: 10.1161/STROKEAHA.121.038659. Oral Contraceptives, Hormone Replacement Therapy, and Stroke Risk

Therese Johansson 1 2, Philip Fowler 3, Weronica E Ek 1, Alkistis Skalkidou 4, Torgny Karlsson # 1, Åsa Johansson Background: Millions of women worldwide use exogenous hormones as oral contraceptives or hormone replacement therapy. Still, time-dependent and long-term consequences of exogenous hormones on stroke risk remains unclear. Methods: We examined the association between self-reported oral contraceptive and hormone replacement therapy use and stroke risk in 257 194 women from the UK Biobank, born between 1939 and 1970. Outcomes included any type of stroke, ischemic stroke, intracerebral hemorrhage, and subarachnoid hemorrhage. Exposures were analyzed as timevarying variables in Cox regression models. Results: During first year of oral contraceptive use, an increased event rate of any stroke was observed (hazard ratio [HR], 2.49 [95% CI, 1.44-4.30]), while the hazards were found to be comparable during remaining years of use (HR, 1.00 [95% CI, 0.86-1.14]), compared with nonusers. Similarly, first year of hormone replacement therapy use was associated with higher hazard rates of any stroke (HR, 2.12 [95% CI, 1.66-2.70]), as well as cause-specific stroke, including ischemic stroke (HR, 1.93 [95% CI, 1.05-3.57]) and subarachnoid hemorrhage (HR, 2.17 [95% CI, 1.25-3.78]), which remained increased for any stroke during remaining years of use (HR, 1.18 [95% CI, 1.05-1.31]), and after discontinuation (HR, 1.16 [95% CI, 1.02-1.32]). Conclusions: Oral contraceptive use and hormone replacement therapy were associated with an increased risk of stroke, especially during the first year of use, possibly due to immediate changes in hemostatic balance. This study provides new insights on the effects of hormone exposure on stroke risk and provide evidence of not only an overall risk but also a pronounced effect seen in the beginning of treatment.

#### Menopause, 2022 Jun 22. doi: 10.1097/GME.00000000001986. Online ahead of print.

### The association of vasomotor symptoms during the menopausal transition and cognition in later life

Amalia Peterson 1, Reena T Gottesman 1, Eliza C Miller 1, Sarah E Tom

Objective: The majority of women experience vasomotor symptoms (VMS) during the menopausal transition. Whether self-reported VMS are associated with cognitive test performance later in life remains unclear. The goal of this study was to determine whether a greater burden of VMS is associated with poor later-life cognition. Methods: The Wisconsin Longitudinal Study is a prospective study of randomly selected Wisconsin high school graduates of the class of 1957. At ages 65 and 72, a random subset of participants completed six cognitive tests, including similarities, letter and category fluency, immediate and delayed word recall, and digit ordering. Nested regression models were used to examine the association between extent of VMS, assessed at age 54, and baseline cognition at 65, adjusting for early-life socioeconomic status, women's reproductive health variables, intelligence quotient, and midlife income. This series of models was also used to examine the association between VMS and change in cognition score from age 65 to 72. In sensitivity analyses, models were repeated in a sample using multiple imputation for missing covariates. Results: Of the 5,326 women enrolled, 874 had data on VMS, covariates, and all cognitive tests. In an unadjusted model, higher VMS were associated with a lower similarities score (b = -0.09 95% CI -0.16 to -0.02) at age 65 but no other cognitive tests. In adjusted models, VMS were not related to cognition at age 65 or change in cognition. Results remained similar with multiple imputation. Conclusions: Our study does not support a relationship between self-reported VMS and cognition later in life.