



Selección de Resúmenes de Menopausia

Semana del 17 al 23 de Diciembre de 2014

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Serum 25-hydroxyvitamin D levels are associated with carotid atherosclerosis in normotensive and euglycemic Chinese postmenopausal women: the Shanghai Changfeng study.

Ma H, Lin H, Hu Y, Li X, He W, Jin X, Gao J, Zhao N, Liu Z, Gao X.

BACKGROUND: The role of serum 25-hydroxyvitamin D (25 (OH) D) in atherogenesis is unclear. We investigated whether the 25 (OH) D is independently associated with the carotid intima-media thickness (CIMT) and carotid plaques in normotensive and euglycemic postmenopausal women. **METHODS:** A total of 671 normotensive and euglycemic postmenopausal women (mean age, 58.8 years) were enrolled from the Changfeng Study. A standard interview, anthropometrics measurements and laboratory analyses were performed for each participant. Bilateral CIMTs were measured using ultrasonography, and the presence of carotid plaques was assessed. The serum 25 (OH) D was measured using electrochemiluminescence immunoassay. **RESULTS:** Serum 25 (OH) D was 43.6 +/- 18.2 nmol/L in the postmenopausal women. Compared with subjects with 25 (OH) D in the first, second and third quartiles, subjects with 25 (OH) D in the fourth quartile had decreased CIMT and prevalence of carotid plaque (0.684 +/- 0.009 mm vs 0.719 +/- 0.009 mm, 0.708 +/- 0.009 mm and 0.709 +/- 0.009 mm; 10.8% vs 19.0%, 14.8% and 16.8%, respectively). After adjusting for conventional CVD risk factors, PTH, liver and renal function, postmenopausal women with 25 (OH) D in the fourth quartile still had lower CIMT than those in the first, second and third quartiles ($p = 0.039$) and the subjects in the fourth quartile had a 0.421-fold decreased risk of carotid plaques relative to those in the lowest quartile (95% confidence interval 0.209 to 0.848). **CONCLUSIONS:** These results suggest serum 25 (OH) D is independently and inversely associated with carotid atherosclerosis in postmenopausal women with normal blood pressure and normal glucose tolerance.

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Associations of Menopausal Vasomotor Symptoms with Fracture Incidence.

Crandall CJ1, Aragaki A, Cauley JA, Manson JE, LeBlanc E, Wallace R, Wactawski-Wende J, LaCroix A, O'Sullivan MJ, Vitamins M, Watts NB.

Context: Vasomotor symptoms (VMS) are common. Whether VMS are associated with fracture incidence or bone mineral density (BMD) levels is unknown. **Objective:** This study aimed to examine associations of baseline VMS with fracture incidence and BMD. **Design:** This was a prospective observational study with mean (SD) followup of 8.2 (1.7) years (1993-2005). **Setting:** Forty United States clinical centers. **Participants:** We examined data from Women's Health Initiative Clinical Trial participants ($n = 23\ 573$) age 50-79 years not using menopausal hormone therapy, and 4,867 participants of the BMD sub-study. **Interventions:** None. **Main Outcome Measures:** We measured baseline VMS, incident adjudicated fractures, and BMD (baseline, annual visits 1, 3, 6, and 9). **Results:** After adjustment for baseline age, body mass index, race/ethnicity, smoking, and education, the hazard ratio for hip fracture among women with baseline moderate/severe VMS (vs no VMS) was 1.78 (95% confidence interval [CI], 1.20-2.64; $P = .01$). There was no association between VMS and vertebral fracture. VMS severity was inversely associated with BMD during followup ($P = .004$ for femoral neck, $P = .045$ for lumbar spine). In repeated measures models, compared with women who reported no VMS, women with moderate/severe VMS had 0.015 g/cm² lower femoral neck BMD (95% CI, -0.025--0.005) and 0.016 g/cm² lower lumbar spine BMD (95% CI, -0.032--0.004). **Conclusions:** Women with moderate/severe VMS have lower BMD and increased hip fracture rates. Elucidation of the biological mechanisms underlying these associations may inform the design of preventive strategies for at-risk women prior to occurrence of fracture.

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The effectiveness of exercise as treatment for vasomotor menopausal symptoms: randomised controlled trial.

Daley A1, Thomas A, Roalfe A, Stokes-Lampard H, Coleman S, Rees M, Hunter M, MacArthur C.

OBJECTIVE: To investigate the effectiveness of exercise as treatment for vasomotor menopausal symptoms. **DESIGN:** Three-group randomised controlled trial, two exercise interventions and a control group. **SETTING:** Primary Care, West Midlands UK. **POPULATION:** Perimenopausal and postmenopausal women experiencing at least five hot flushes/night sweats per day and not taken MHT in previous 3 months were recruited from 23 general practices. **METHODS:** Participants in both exercise interventions groups were offered two face-to-face consultations with a physical activity facilitator to support engagement in regular exercise. In addition, one exercise group received a menopause-specific information DVD and written materials to encourage regular exercise and the other exercise group was offered the opportunity to attend exercise social support groups in their communities. Interventions lasted 6 months. **MAIN OUTCOME MEASURE:** The primary outcome was frequency of hot flushes/night sweats at 6-month up. **RESULTS:** Two hundred and sixty-one women were randomised (n = 87 per group). Neither of the exercise intervention groups reported significantly less frequent hot flushes/night sweats per week than controls (exercise-DVD versus control: -8.9, 95% CI -20.0 to 2.2; exercise-social support versus control: -5.2, 95% CI -16.7 to 6.3). **CONCLUSIONS:** This trial indicates that exercise is not an effective treatment for hot flushes/night sweats. Contrary to current clinical guidance, women should not be advised that exercise will relieve their vasomotor menopausal symptoms.

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Body mass index and risk of breast cancer: a nonlinear dose-response meta-analysis of prospective studies.

Xia X, Chen W, Li J, Chen X, Rui R, Liu C, Sun Y, Liu L, Gong J, Yuan P.

The role of Body Mass Index (BMI) for Breast Cancer (BC) remains to be great interest for a long time. However, the precise effect of nonlinear dose-response for BMI and BC risk is still unclear. We conducted a dose-response meta-analysis to quantitatively assess the effect of BMI on BC risk. Twelve prospective studies with 4,699 cases identified among 426,199 participants and 25 studies of 22,809 cases identified among 1,155,110 participants in premenopausal and postmenopausal groups, respectively, were included in this meta-analysis. Significant non-linear dose-response ($P < 0.001$) association was identified between BMI and BC risk in postmenopausal women. Individuals with BMI of 25, 30, and 35 kg/m² yielded relative risks (RRs) of 1.02 [95% confidence interval (CI): 0.98-1.06], 1.12 (95% CI: 1.01-1.24), and 1.26 (95% CI: 1.07-1.50), respectively, when compared to the mean level of the normal BMI range. However, inverse result though not significant was observed in premenopausal women. In conclusion, the results of this meta-analysis highlighted that obesity contributed to increased BC risk in a nonlinear dose-response manner in postmenopausal women, and it is important to realize that body weight control may be a crucial process to reduce BC susceptibility.

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Parity, Lactation, Bone Strength, and 16-year Fracture Risk in Adult Women: Findings From the Study of Women's Health Across the Nation (SWAN).

Mori T, Ishii S, Greendale GA, Cauley JA, Ruppert K, Crandall CJ, Karlamangla AS.

Our objective was to examine the associations of lifetime parity and accumulated length of lactation with bone strength in women prior to the menopause transition and fracture risk during and after the transition. Participants were 2239 pre- or early perimenopausal women from the Study of Women's Health Across the Nation (SWAN), ages 42-53 at baseline, who had no childbirths after age 42. Bone mineral density (BMD) was measured in the femoral neck and the lumbar spine at the baseline SWAN visit using dual-energy x-ray absorptiometry, and composite indices of femoral neck strength relative to load (in three failure modes: compression, bending, and impact) were calculated from femoral neck BMD, femoral neck size, and body size. Data on fractures after age 42 were collected for a median follow-up of 15.7years (interquartile range, 11.4 -18.5years). In multiple linear regression adjusted for covariates, lifetime parity was associated positively with femoral neck strength relative to load (0.024 standard deviation (SD) increment in impact strength index per childbirth, $p=0.049$), but accumulated length of lactation was associated negatively with lumbar spine BMD (0.018 SD decrement per every additional 6months of lactation $p=0.040$). In Cox proportional hazards regression adjusted for covariates, neither parity nor lactation was associated

with fracture hazard after age 42. In conclusion, parity and lactation have little impact on peak bone strength prior to menopause, and do not affect fracture risk after age 42 over 16-year follow-up.

Horm Cancer. 2014 Dec 19. [Epub ahead of print]

The Relationship Between Bilateral Oophorectomy and Plasma Hormone Levels in Postmenopausal Women.

Kotsopoulos JI, Shafrir AL, Rice M, Hankinson SE, Eliassen AH, Tworoger SS, Narod SA.

Oophorectomy prior to natural menopause reduces breast cancer risk. We evaluated whether timing of oophorectomy (during premenopause vs. postmenopause) or hysterectomy was associated with hormone levels, specifically estradiol, estrone, estrone sulfate, testosterone, sex hormone binding globulin (SHBG), dehydroepiandrosterone sulfate (DHEAS), and prolactin, using data from the Nurses' Health Study. We included 2,251 postmenopausal women not using hormones who provided blood samples in 1989-1990 and/or 2000-2002, and who were controls in various nested case-control studies. We used multivariate linear mixed-effects models to assess geometric mean hormone levels by surgery status. Bilateral oophorectomy was associated with 25 % lower testosterone levels versus women with natural menopause (20.8 vs. 15.5 ng/dL) ($P < 0.0001$) with no effect of timing of surgery ($P = 0.80$). SHBG levels were lower among women with a premenopausal oophorectomy (52.2 nmol/L) versus those with natural menopause (58.1 nmol/L) or a postmenopausal oophorectomy (62.0 nmol/L) ($P = 0.02$). There was no significant association of oophorectomy with estradiol, estrone, estrone sulfate, DHEAS, or prolactin levels ($P \geq 0.23$). A simple hysterectomy was associated with a significant 8 % lower testosterone ($P = 0.03$) and 14 % lower DHEAS ($P = 0.02$) levels compared with women with natural menopause but not with other hormone levels. Although limited by small numbers, our findings suggest no differential influence of timing of surgery on sex hormone levels. The reduction of testosterone levels in women with oophorectomy or hysterectomy suggests a possible role of this hormone in postmenopausal breast cancer development.