



## Selección de Resúmenes de Menopausia

Semana del 9 al 15 de mayo de 2018

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**Ann Cardiol Angeiol (Paris). 2018 May 8. pii: S0003-3928(18)30052-0. doi: 10.1016/j. [Epub ahead of print]**

### **Effect of vitamin D on the variability of blood pressure in premenopausal and menopausal hypertensive women in the area of Blida (Algeria).**

Bachir Cherif A, Temmar M, Bennouar S, Bouamra A, Taleb A, Bouraghda A, Bouafia MT.

**OBJECTIVE:** To evaluate the effect of 25 (OH) vitamin D supplementation on blood pressure (BP) variability in hypertensive women in the pre-menopausal and post-menopausal periods. **MATERIALS AND METHODS:** 881 hypertensive women prospectively followed for an interventional study between January 2016 and September 2017, in specialized consultation at the department of internal medicine at the Blida University Hospital (Algeria). Four hundred and thirty nine premenopausal women (group I) and 442 menopausal women (group II). The initial serum 25 (OH) D level for each group was determined by the enzyme immunoassay. In groups I and II, we identified 2 subgroups, A: insufficiency (vit D between 29 and 20ng/ml) and B: deficiency (vit D less than 20ng/L). Antihypertensive therapy was supplemented with an additional 200000IU/month cholecalciferol for the two B subgroups. The variability in BP was calculated as the ratio of mean systolic and diastolic BP during daytime and nighttime, with performing ambulatory BP measurement at baseline, 3, 6, and 12 months of follow-up. **RESULTS:** At inclusion, the level of 25 (OH) D was lower ( $P<0.05$ ) in subgroups IB ( $19.3\pm 8.5\text{ng/ml}$ ) and IIB ( $18.2\pm 9, 5\text{ng/ml}$ ) compared to subgroups IA ( $28.1\pm 10.7\text{ng/ml}$ ) and IIA ( $25.2\pm 10.1\text{ng/ml}$ ). After supplementation, the level of 25 (OH) D increased in subgroup IB ( $38.3\pm 11.9\text{ng/ml}$ ) and in subgroup IIB ( $37.3\pm 10, 5\text{ng/ml}$ ) and became higher ( $P<0.001$ ) than in subgroups IA and IIA. Between subgroups IA and IB, at inclusion, there is no difference ( $P>0.05$ ) in the SBP and DBP variability during the day and at night. After treatment, the variability of the SBP at night became lower ( $P<0.02$ ) in group IB compared to group IA. In subgroup IIB, daytime variability indices were higher ( $P=0.04$ ) at inclusion than in group IIA. After treatment, the variability of SBP during the day decreased but remained the highest ( $P<0.05$ ) in subgroup IIB ( $14.8\pm 10.8\text{mmHg}$ ) compared to subgroup IB ( $12.0\pm 8.1\text{mmHg}$ ), as well as to subgroups IIA ( $10.9\pm 9.8\text{mmHg}$ ) and IA ( $10\pm 8.1\text{mmHg}$ ). We found a significant correlation of cholecalciferol with the variability of SBP during the day. **CONCLUSIONS:** Vitamin D deficiency appears to be a factor of BP variability. Although the variability of the postmenopausal group remains higher than that of the other groups, the correction of the level of 25 (OH) D by the supply of cholecalciferol 200000 IU per month leads to a reduction in the variability of BP in the studied hypertensive women could help to prevent morbimortal complications.

**Food Funct. 2018 May 10. doi: 10.1039/c8fo00205c. [Epub ahead of print]**

### **Fruit and vegetable consumption and the risk of postmenopausal osteoporosis: a meta-analysis of observational studies.**

Hu D, Cheng L, Jiang W.

The association of the consumption of fruit and vegetables (FV) and the risk of postmenopausal osteoporosis (PMOP) has been a controversial subject. Thus, we carried out a meta-analysis to evaluate the association of FV consumption and the risk of PMOP. PubMed, Web of Science and Wan Fang were searched for relevant articles published up to March 2018. To evaluate the association of FV intake and PMOP risk, combined odds ratio (OR) and 95% confidence intervals (CIs) were calculated with the fixed or random effects model. Eighteen studies involving 12 643 participants were included in this meta-analysis. When comparing the highest with the lowest consumption, the pooled OR of PMOP was 0.68 (95% CI, 0.56-0.83;  $I^2 = 57.3\%$ ; REM) for fruit and 0.87 (95% CI, 0.65-1.16;  $I^2 = 68.9\%$ ; REM) for vegetables. For the intake of fruit and the risk of PMOP, subgroup analysis showed a significant association in case-control studies (OR, 0.52; 95% CI, 0.35-0.77;  $I^2 = 3.1\%$ ; FEM) and cross-sectional studies (OR, 0.73; 95% CI, 0.59-0.89;  $I^2 = 61.1\%$ ; REM). For the intake of vegetables and the risk of PMOP, subgroup analysis showed a significant association in case-control studies (OR, 0.62; 95% CI, 0.42-0.90;  $I^2 = 0.0\%$ ; FEM) but not in cross-sectional studies (OR, 0.95; 95% CI, 0.69-1.29;  $I^2 = 68.9\%$ ; REM). This meta-analysis indicates that fruit intake might be beneficial for the prevention of osteoporosis in postmenopausal women. The findings need to be confirmed by further investigations.

**Climacteric. 2018 May 9:1-7. doi: 10.1080/13697137.2018.1461826. [Epub ahead of print]**

## **Vaginal Health: Insights, Views & Attitudes (VIVA-LATAM): results from a survey in Latin America.**

Nappi RE, de Melo NR, Martino M, Celis-González C, Villaseca P, Röhrich S, Palacios S.

**OBJECTIVE:** To investigate awareness in Latin America, knowledge of postmenopausal vaginal atrophy was evaluated in a sample of women from this region. **METHODS:** A total of 2509 postmenopausal women aged 55-65 years, resident in Argentina, Brazil, Chile, Colombia and Mexico, completed a structured online questionnaire. **RESULTS:** Over half the surveyed population (57%) reported experiencing symptoms of vaginal atrophy. Only 6% of the overall cohort attributed symptoms of vaginal atrophy directly to the condition, and 71% did not consider the condition to be chronic, resulting in many women not accessing effective therapy. Half the women (49%) affected by vaginal atrophy had used lubricating gels and creams; 36% had used some form of local hormone treatment. To understand symptoms and/or treatment options for vaginal discomfort, the majority of survey participants (92%) were willing to seek advice from health-care professionals; most (61%) felt/would feel comfortable talking to their doctor about this. **CONCLUSION:** Many women in Latin America lack knowledge of postmenopausal vaginal atrophy, not appreciating the chronic nature of the condition, and may benefit from dialog initiated by health-care professionals to facilitate greater understanding and increased awareness of the availability of effective treatment.

**Osteoporos Int. 2018 May 8. doi: 10.1007/s00198-018-4534-5. [Epub ahead of print]**

## **Benefits and safety of dietary protein for bone health-an expert consensus paper endorsed by the European Society for Clinical and Economical Aspects of Osteoporosis, Osteoarthritis, and Musculoskeletal Diseases and by the International Osteoporosis Foundation.**

Rizzoli R, Biver E, Bonjour JP, Coxam V, Goltzman D, Kanis JA, Lappe J, Rejnmark L, Sahni S, Weaver C, Weiler H, Reginster JY.

A summary of systematic reviews and meta-analyses addressing the benefits and risks of dietary protein intakes for bone health in adults suggests that dietary protein levels even above the current RDA may be beneficial in reducing bone loss and hip fracture risk, provided calcium intakes are adequate. Several systematic reviews and meta-analyses have addressed the benefits and risks of dietary protein intakes for bone health in adults. This narrative review of the literature summarizes and synthesizes recent systematic reviews and meta-analyses and highlights key messages. Adequate supplies of dietary protein are required for optimal bone growth and maintenance of healthy bone. Variation in protein intakes within the "normal" range accounts for 2-4% of BMD variance in adults. In older people with osteoporosis, higher protein intake ( $\geq 0.8$ -g/kg body weight/day, i.e., above the current RDA) is associated with higher BMD, a slower rate of bone loss, and reduced risk of hip fracture, provided that dietary calcium intakes are adequate. Intervention with dietary protein supplements attenuate age-related BMD decrease and reduce bone turnover marker levels, together with an increase in IGF-I and a decrease in PTH. There is no evidence that diet-derived acid load is deleterious for bone health. Thus, insufficient dietary protein intakes may be a more severe problem than protein excess in the elderly. Long-term, well-controlled randomized trials are required to further assess the influence of dietary protein intakes on fracture risk.

**Menopause. 2018 May 7. doi: 10.1097/GME.0000000000001131. [Epub ahead of print]**

## **Effects of vaginal estradiol tablets and moisturizer on menopause-specific quality of life and mood in healthy postmenopausal women with vaginal symptoms: a randomized clinical trial.**

Diem SJ, Guthrie KA, Mitchell CM, Reed SD, Larson JC, Ensrud KE, LaCroix AZ.

**OBJECTIVE:** Compare the effects of a vaginal estradiol tablet and a vaginal moisturizer, each to placebo, on menopause-related quality of life and mood in postmenopausal women with moderate-severe vulvovaginal symptoms. **METHODS:** A total of 302 postmenopausal women enrolled in a 12-week, double-blind, placebo-controlled randomized trial were assigned to vaginal 10 $\mu$ g estradiol tablet plus placebo gel (n=102), vaginal moisturizer plus placebo tablet (n=100), or dual placebo (n=100). We measured change from randomization to 12 weeks in total score of the Menopause-Specific Quality of Life (MENQOL) questionnaire. We also evaluated the four MENQOL domains,

depressive symptoms as measured by the Patient Health Questionnaire 8, and anxiety symptoms as measured by the Generalized Anxiety Disorder (GAD-7) questionnaire. **RESULTS:** Treatment with vaginal estradiol resulted in significantly greater improvement in total MENQOL scores compared to dual placebo (mean difference between arms -0.3 at 12 weeks (95% confidence interval [CI] -0.5, 0.0;  $P=0.01$ ). A statistically significant group mean difference favoring vaginal estradiol was observed for the MENQOL sexual function domain (-0.4 at 12 weeks; 95% CI -1.0, 0.1;  $P=0.005$ ), but not for any of the other domains. Treatment with vaginal moisturizer did not provide greater improvement compared to placebo in total MENQOL scores (mean difference 0.2 at 12 weeks; 95% CI -0.1, 0.4;  $P=0.38$ ) or in any of the MENQOL domains. Neither treatment group showed improvement compared with placebo in the Patient Health Questionnaire 8 or Generalized Anxiety Disorder Questionnaire. **CONCLUSIONS:** Treatment with low-dose vaginal estradiol, but not vaginal moisturizer, modestly improved menopause-related quality of life and sexual function domain scores in postmenopausal women with moderate-severe vulvovaginal symptoms.

**Menopause. 2018 May 7. doi: 10.1097/GME.0000000000001126. [Epub ahead of print]**

### **Vasomotor symptoms in women over 60: results from the Data Registry on Experiences of Aging, Menopause, and Sexuality (DREAMS).**

David PS, Kling JM, Vegunta S, Faubion SS, Kapoor E, Mara KC, Schroeder DR, Hilsaca KF, Kuhle CL.

**OBJECTIVE:** Frequency of vasomotor symptoms (VMS) in older women and the contributing factors are largely undefined. We measured the frequency of moderate-to-severe vasomotor symptoms (msVMS) in women  $\geq 60$  years of age and examined their characteristics to determine factors that may associate with VMS in older women. **METHODS:** A cross-sectional survey was completed using the Menopause Health Questionnaire from the Data Registry on Experiences of Aging, Menopause, and Sexuality. Data were collected from women presenting for menopause consultation to Mayo Clinic, Rochester, MN, from January 1, 2006 to October 7, 2014. We created a binary variable where women were classified as having msVMS bother if they reported "quite a bit" or "extremely" compared with women reporting "not at all" or "a little bit." Women with and without msVMS were evaluated by menopause type, self-rated health, current tobacco, caffeine, and alcohol use, as well as pertinent medication use. Associations between participant characteristics and msVMS were evaluated using logistic regression and a multivariable model with age as a covariate. Interactions between participant characteristics and age were also assessed. **RESULTS:** Of the 4,956 women presenting for menopause consultation, 921 (18%) were  $\geq 60$  years old. Of these, 379 (41.2%) reported msVMS bother. Women with msVMS were more likely to have a history of nonspontaneous menopause and report their health as fair, versus good or excellent. Women reporting current use of hormone therapy (HT) (21%) were less likely to report msVMS compared with those not taking HT ( $P<0.001$ ). **CONCLUSIONS:** A substantial number of women seen in a specialty menopause clinic were over age 60 years and reported msVMS, highlighting that VMS may be disruptive in women over a decade past the natural age of menopause.

**Menopause. 2018 May 7. doi: 10.1097/GME.0000000000001115. [Epub ahead of print]**

### **Estrogen-alone therapy and invasive breast cancer incidence by dose, formulation, and route of delivery: findings from the WHI observational study.**

Shufelt C, Bairey Merz CN, Pettinger MB, Choi L, Chlebowski R, et al; Women's Health Initiative Investigators.

**OBJECTIVE:** Research on the relationships between different hormone therapy doses, formulation and routes of delivery, and subsequent breast cancer incidence has been limited. This study directly compared different estrogen doses, formulations, and route of delivery of estrogen alone among women with a hysterectomy in relation to invasive breast cancer incidence. **METHODS:** The Women's Health Initiative Observational Study is a large multicenter prospective cohort study conducted at 40 US sites. Analyses included 26,525 postmenopausal women with a hysterectomy, aged 50 to 79 years, at study entry, recruited between September 1993 and December 1998, with annual follow-up through September 12, 2005. **RESULTS:** Average follow-up was 8.2 years. For conjugated equine estrogen (CEE) users, no difference was observed between low-dose CEE ( $<0.625$ mg) compared with conventional-dose CEE (0.625mg) for breast cancer (hazard ratio [HR] 0.99, 95% confidence interval [CI] 0.65, 1.48). Compared with conventional-dose CEE, transdermal estrogen was associated with a nonsignificant lower risk of invasive breast cancer (HR 0.75, 95% CI 0.47, 1.19). The low prevalence of transdermal use likely limited power for this comparison, and for a comparison of oral estradiol to conventional-dose CEE (HR 1.20, 95% CI 0.84, 1.39). **CONCLUSION:** Our results indicate that invasive breast cancer risk did not differ appreciably in women with a hysterectomy using estrogen-alone when directly comparing different doses, formulations, and routes of delivery to the conventional oral CEE.

These findings suggest that the lower breast cancer risk found in the WHI estrogen-alone trial may extend to lower doses of CEE. Additional research is needed to confirm these hypotheses.

**Neurotox Res. 2018 May 5. doi: 10.1007/s12640-018-9909-z. [Epub ahead of print]**

### **Vitamin D Supplementation Reverses DNA Damage and Telomeres Shortening Caused by Ovariectomy in Hippocampus of Wistar Rats.**

Siebert C, Dos Santos TM, Bertó CG, Parisi MM, Coelho RP, Manfredini V, Barbé-Tuana FM, Wyse ATS.

The aim of this study was to investigate the effect of ovariectomy (OVX), a surgical model of menopause, and/or vitamin D (VIT D) supplementation on oxidative status, DNA damage, and telomere length in hippocampus of rats at two ages. Ninety-day-old (adult) or 180-day-old (older) female Wistar rats were divided into four groups: SHAM, OVX, VIT D, and OVX + VIT D. Thirty days after OVX, rats were supplemented with VIT D (500 IU/kg) by gavage, for a period of 30 days. Results showed that OVX altered antioxidant enzymes, increasing the activities of catalase in adult rats and superoxide dismutase in older rats. VIT D per se increased the activities of catalase and superoxide dismutase in older rats, but not in adult rats. VIT D supplementation to OVX (OVX + VIT D) rats did not reverse the effect of OVX on catalase in adult rats, but it partially reversed the increase in superoxide dismutase activity in older rats. OVX increased DNA damage in hippocampus of adult and older rats. VIT D per se reduced DNA damage, and when associated to OVX, it partially reversed this alteration. Additionally, OVX caused a telomere shortening in older rats, and VIT D was able to reverse such effect. Taken together, these results demonstrate that surgical menopause in rats causes hippocampal biochemical changes and VIT D appears, at least in part, to act in a beneficial way.

**Prz Menopauzalny. 2018 Mar;17(1):39-42. doi: 10.5114/pm.2018.74901. Epub 2018 Apr 11.**

### **Sexual dysfunction prevalence in a group of pre- and postmenopausal Mexican women.**

Carranza-Lira S1, Núñez FDC1.

**Introduction:** To determine the prevalence of sexual dysfunction in pre and postmenopausal women. **Material and methods:** A cross-sectional, descriptive, comparative study was done in climacteric women from 40 to 59 years of age. Female sexual function was evaluated with the female sexual function index (FSFI) on the day of consultation. The comparison between pre and postmenopausal women and between those with or without sexual dysfunction was done with Mann Whitney U test,  $\chi^2$ , and Spearman's correlation analysis was done. **Results:** One hundred and ten women were studied, 55 were premenopausal (group 1) and 55 postmenopausal (group 2). The median of age in group 1 was 46 (40-58) years and in group 2 it was 53 (45-60) years. Premenopausal women had higher education level than postmenopausal women ( $p < 0.023$ ). From those sexually active, 62.1% had sexual dysfunction. No statistically significant difference was found in education level, religion and marital status between women with or without sexual dysfunction. No difference in sexual dysfunction was found between premenopausal (62.1%) and postmenopausal (62.5%) women, but greater sexual dysfunction was found starting from 50 years age. Age negatively correlated with FSFI score ( $\rho = -0.324$ ,  $p < 0.001$ ). **Conclusion:** In postmenopausal women, those older had a greater impairment in sexual function.