Selección de Resúmenes de Menopausia

Semana del 16 al 22 de noviembre, 2016

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Menopause. 2016 Nov 21. [Epub ahead of print]

Is vulvovaginal atrophy due to a lack of both estrogens and androgens?

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OBJECTIVE: The aim of this study was to review the preclinical data showing the role of both estrogens and androgens in the physiology of the vagina, and, most likely, in vulvovaginal atrophy of menopause. METHODS: Mass spectrometry-based assays (validated according to the FDA guidelines) for the measurement of sex steroids, their precursors, and metabolites were used. In addition to fixation of the vagina for morphological examination, histomorphometry, immunocytochemistry, immunofluorescence, and quantitative reverse transcription polymerase chain reaction were performed. RESULTS: The vaginal epithelium of the animals receiving dehydroepiandrosterone (DHEA) was made of large multilayered columnar mucous cells showing distended cytoplasmic vacuoles representative of an androgenic effect. DHEA also stimulates collagen fiber compactness of the lamina propria (second layer)-an effect essentially due to an androgenic effect, whereas stimulation by DHEA of the muscularis in the third vaginal layer is approximately 70% due to the androgenic conversion of DHEA. Stimulation of the surface area of the nerve endings, on the contrary, is exclusively androgenic. Vaginal weight stimulation by DHEA is about 50% androgenic and 50% estrogenic. CONCLUSIONS: Practically all studies on the influence of steroid hormones in the vagina have focused on luminal epithelial cells. Since all estrogens and androgens in postmenopausal women are made intracellularly and derive from the conversion of circulating DHEA, it is of interest to observe from these preclinical data that DHEA exerts both estrogenic and androgenic activity in the three layers of the vagina, the stimulatory effect on nerve density being 100% androgenic. Taking vaginal weight as a global parameter, the stimulatory effect of DHEA in the rat vagina is about equally estrogenic and androgenic, thus illustrating the importance of androgens in vaginal morphology and function, and the likely importance of androgens in vulvovaginal atrophy of menopause.

Gynecol Endocrinol. 2016 Sep;32(9):762-766. Epub 2016 Mar 26.

Influence of obesity and hormone disturbances on sexuality of women in the menopause.

Simoncig Netjasov A, Tančić-Gajić M, Ivović M, Marina L, Arizanović Z, Vujović S.

OBJECTIVE: To assess influence of obesity and hormone disturbances on sexuality in the menopause. METHODS: The study included 73 menopausal women, who were divided into groups according to body mass index (BMI) ≥ 26.7 kg/m2. Anthropometric characteristics and blood pressure were measured. Blood was taken at 08:00 for hormones. All the participants filled in McCoy Female Sexual Questionnaire for the assessment of sexual life. STATISTICS: Student's t-test, correlation, analysis of variance (ANOVA). RESULTS: Follicle-stimulating hormone (FSH), luteinizing hormone (LH) and sex hormone-binding globulin (SHBG) were very significantly lower in obese compared to controls. E2 and systolic blood pressure were very significantly, while diastolic blood pressure significantly higher in obese compared to controls. Obese women had significantly decreased frequency of pain during sexual intercourse (3.48 ± 2.64 vs. 4.09 ± 2.81). Influence of age on frequency of sexual intercourse was very significant. Significant influence in interaction between BMI and age on frequency of sexual fantasies as well as significant influence of BMI on satisfaction with partner as lover is also found. CONCLUSION: Obesity has influence on different aspects of sexuality in the postmenopausal women. Our results suggest the need of awareness toward obesity and its impact on sexuality in the menopause.

Clin Psychol Sci. 2016 Sep;4(5):919-935.

Naturally Occurring Changes in Estradiol Concentrations in the Menopause Transition Predict Morning Cortisol and Negative Mood in Perimenopausal Depression.

Gordon JL, Eisenlohr-Moul TA, Rubinow DR, Schrubbe L, Girdler SS.

Risk of depression increases considerably during the menopause transition (or perimenopause) - the 5-6 years surrounding the last menstrual period. While the mechanisms underlying this increased risk are unknown, we have

hypothesized that excessive estradiol (E2) fluctuation, which accompanies the perimenopause, may be implicated. We have furthermore proposed that dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis may underlie E2 fluctuation's effect on mood. This study examined the relationship between weekly changes in salivary E2, salivary cortisol levels and weekly mood in 30 perimenopausal women recruited to achieve equal numbers of women with current depression, past depression, and no history of depression. Greater weekly increases in E2 were associated with increased cortisol among past and currently depressed women; greater E2 increases were also associated with negative mood among currently depressed women. These findings provide evidence that HPA axis dysregulation, correlated with E2 fluctuation, may be implicated in the pathophysiology of perimenopausal depression.

J Am Geriatr Soc. 2016 Nov 11. doi: 10.1111/jgs.14461. [Epub ahead of print]

Long-Term Hormone Replacement Therapy Is Associated with Low Coronary Artery Calcium Levels in a Cohort of Older Women: The Age, Gene/Environment Susceptibility-Reykjavik Study.

Gudmundsson A, Aspelund T, Sigurdsson G, Harris T, Launer LJ, Gudnason V, Jonsson H.

OBJECTIVES: To assess the relationship between hormone replacement therapy (HRT) and coronary artery calcium (CAC). DESIGN: Cross-sectional. SETTING: Established population-based cohort in Reykjavik, Iceland. PARTICIPANTS: Women (mean age 76 ± 5) who had completed questionnaires on HRT use (N = 2,867). MEASUREMENTS: Coronary artery calcium assessed using computed tomography was the outcome variable and was compared between women with history of HRT and those who had never used HRT and analyzed according to age, length of use, and time after menopause that HRT was initiated. RESULTS: Eight hundred seventy-two (30.4%) participants had used HRT, and 312 (10.9%) were current users. After adjustment for age, other late-life variables, and a propensity score based on midlife data for HRT use as observed in late life, there were significant negative associations between CAC and history and length of HRT use. This association was evident in all age categories. When HRT had been used for longer than 15 years, median CAC level was less than 50% of that observed in never users. The lowest CAC was observed in those who started HRT within 5 years after menopause. The prevalence of coronary events was comparable in both groups.
CONCLUSION: A strong association was found between long-term HRT use and low CAC. The negative association between duration of HRT and CAC was evident in all age groups of older women.

J Korean Acad Nurs. 2016 Oct;46(5):619-629. doi: 10.4040/jkan.2016.46.5.619.

Effects of Aromatherapy on Menopausal Symptoms, Perceived Stress and Depression in Middle-aged Women: A Systematic Review.

Kim S, Song JA, Kim ME, Hur MH.

PURPOSE: This study was a systematic review to evaluate the effects of aromatherapy on menopausal symptoms, perceived stress and depression in middle aged-women. METHODS: Eight databases were searched from their inception September 8, 2015. Two reviewers independently performed the selection of the studies, data abstraction and validations. The risk of bias was assessed using Cochrane criteria. For analysis of the data, a meta-analysis of the studies was performed. RESULTS: From the electronic databases, 73 articles were selected, and 19 removed due to duplication. After two reviewers read the abstracts of 54 studies, 34 studies were selected. Complete papers for 34 original articles were read and, 12 studies which met selection criteria were reviewed and the effects of aromatherapy on menopausal symptoms, stress and depression analyzed using meta-analysis with RevMan. In the 2 studies which included Randomized Controlled Trials testing of aromatherapy on menopausal symptoms and comparison of control and placebo groups were done. Aromatherapy massage was favorably effective in reducing the menopausal symptoms compared to the control group (n=118, MD=-6.33; 95% CI -11.51 to -1.15), and compared to the placebo group (n=117, MD=-4.14; 95% CI -7.63 to -0.64). Also aromatherapy was effective in reducing stress (n=72, SMD=-0.64; 95% CI -1.12 to -0.17) and depression (n=158, MD=-5.63; 95% CI -10.04 to -1.22). CONCLUSION: There is limited evidence suggesting that aromatherapy for middle-aged women may be effective in controlling menopausal symptoms, perceived stress and depression.

Sleep. 2016 Nov 14. pii: sp-00299-16. [Epub ahead of print]

Sleep Characteristics and Carotid Atherosclerosis among Midlife Women.

Thurston RC, Chang Y, von Känel R, Barinas-Mitchell E, Jennings JR, Hall MH, Santoro N, Buysse DJ, Matthews KA.

STUDY OBJECTIVES: Midlife, which encompasses the menopause transition in women, can be a time of disrupted sleep and accelerated atherosclerosis accumulation. Short or poor sleep quality has been associated with cardiovascular disease (CVD) risk; few studies have investigated relations among midlife women. We tested whether shorter actigraphy sleep time or poorer subjective sleep quality was associated with carotid atherosclerosis among midlife women. METHODS: 256 peri- and postmenopausal women aged 40-60 completed three days of wrist actigraphy, hot flash monitoring, questionnaires [Pittsburgh Sleep Quality Index (PSQI), Berlin], a blood draw, and carotid ultrasound [intima media thickness (IMT), plaque]. Associations of objective (actigraphy) and subjective (PSQI) sleep with IMT/plaque were tested in regression models (covariates: age, race, education, body mass index, blood pressure, lipids, insulin resistance, medications, snoring, depressive symptoms, sleep hot flashes, estradiol). RESULTS: Shorter objective sleep time was associated with higher odds of carotid plaque [for each hour shorter sleep, plaque score ≥2, odds ratio, OR(95% confidence interval, CI)=1.58 (1.11-2.27), p=.01; plaque score=1, OR(95%CI)=0.95 (.68-1.32), p=.75, vs. no plaque, multivariable]. Poorer subjective sleep quality was associated with higher mean IMT [beta, b (standard error, SE)=.004(.002), p=.03], maximal IMT [b(SE)=.009(.003), p=.005], and plaque [plaque score ≥2, OR(95% CI)=1.23(1.09-1.40), p=.001; score=1, OR(95%CI)=1.06(.93-1.21), p=.37, vs. no plaque] in multivariable models. Findings persisted additionally adjusting for sleep hot flashes and estradiol. CONCLUSIONS: Shorter actigraphy-assessed sleep time and poorer subjective sleep quality were associated with increased carotid atherosclerosis among midlife women.

Biomed Res Int. 2016;2016:8790691. Epub 2016 Oct 26.

Differential Item Functioning of the Psychological Domain of the Menopause Rating Scale.

Monterrosa-Castro A, Portela-Buelvas K, Oviedo HC, Herazo E, Campo-Arias A.

Introduction. Quality of life could be quantified with the Menopause Rating Scale (MRS), which evaluates the severity of somatic, psychological, and urogenital symptoms in menopause. However, differential item functioning (DIF) analysis has not been applied previously. Objective. To establish the DIF of the psychological domain of the MRS in Colombian women. Methods. 4,009 women aged between 40 and 59 years, who participated in the CAVIMEC (Calidad de Vida en la Menopausia y Etnias Colombianas) project, were included. Average age was 49.0 ± 5.9 years. Women were classified in mestizo, Afro-Colombian, and indigenous. The results were presented as averages and standard deviation (X ± SD). A p value <0.001 was considered statistically significant. Results. In mestizo women, the highest X ± SD were obtained in physical and mental exhaustion (PME) (0.86 ± 0.93) and the lowest ones in anxiety (0.44 ± 0.79). In Afro-Colombian women, an average score of 0.99 ± 1.07 for PME and 0.63 ± 0.88 for anxiety was gotten. Indigenous women obtained an increased average score for PME (1.33 ± 0.93). The lowest score was evidenced in depressive mood (0.50 ± 0.81), which is different from other Colombian women (p < 0.001). Conclusions. The psychological items of the MRS show differential functioning according to the ethnic group, which may induce systematic error in the measurement of the construct.

Int J Cardiol. 2016 Nov 9. pii: S0167-5273(16)33609-9. doi: 10.1016/j.ijcard.2016.11.149. [Epub ahead of print]

Effect of hormone replacement therapy with the anti-mineralocorticoid progestin Drospirenone compared to tibolone on endothelial function and central haemodynamics in post-menopausal women.

Vitale C, Mammi C, Gambacciani M, Russo N, Spoletini I, Fini M, Volterrani M, Rosano GM.

Drospirenone (DRSP) is an antialdosterone agent with progestogenic and antiandrogenic effects. This compound, has been recently used in combination with 17β-estradiol (E2) as hormonal therapy in postmenopausal women and has been shown to exert a significant antihypertensive effect in hypertensive post-menopausal women. Aim of the present study was to compare the effect of DRSP/E2 with those of Tibolone (T) on endothelial function, arterial stiffness, and lipid profile of early postmenopausal women naïve on post-menopausal hormonal therapy. Twenty-four women met the inclusion criteria and entered the study. Women were randomized to receive either DRSP/E2 or T for 6months. Blood pressure and heart rate were similar in both groups at baseline and at the end of the study. Compared to baseline, endothelial function assessed by Reactive Hyperemia (RH) significantly improved in women receiving E2/DRSP, whereas no significant differences between baseline and follow up were detected in women receiving Tibolone. Women receiving E2/DRSP showed a significant decrease in pulse wave velocity and Augmentation Index compared to baseline while no changes were observed in women receiving Tibolone. The capacity of sera to trigger endothelial cells apoptosis in vitro measured by cell death assay was significantly reduced by E/DRSP but not by T (HFA-E 70±5,6% vs HFD-E

41±4,5%, p<0,001). In conclusion, the present study shows that the association of Estradiol and Drospirenone as hormonal replacement therapy significantly improves vascular parameters and the composition of sera relevant for vascular protection in early post-menopausal normotensive women. These effects are not shared by Tibolone.

Injury. 2016 Nov 3. pii: S0020-1383(16)30723-9. doi: 10.1016/j.injury.2016.11.002. [Epub ahead of print]

Risk of hip fracture following a wrist fracture-A meta-analysis.

Johnson NA, Stirling ER, Divall P, Thompson JR, Ullah AS, Dias JJ.

AIMS: This purpose of this meta analysis was to investigate and quantify the relative risk of hip fracture in patients who have sustained a wrist fracture. METHOD: Studies were identified by searching Medline, Embase, Cochrane CENTRAL database and CINAHL from their inception to August 2015. Studies reporting confirmed hip fracture following wrist fracture were included. Data extraction was carried out using a modified Cochrane data collection form by two reviewers independently. Quality assessment was carried out using a modified Coleman score and the Newcastle Ottawa scale for cohort studies. An assessment of bias was performed for each study using a modified Cochrane Risk of Bias tool. A pooled relative risk(RR) was estimated with 95% CI from the RR/HRs and CIs reported in the studies. RESULTS:12 studies were included in the final meta-analysis (4 male, 8 female only). Relative risk of hip fracture following wrist fracture for women was 1.43 (CI 1.27 to 1.60). In men it was not significantly increased (RR 2.11, 95% CI: 0.93-4.85). Heterogeneity was low (I squared 0%) for both groups so a fixed effects model was used. CONCLUSION: Risk of a subsequent hip fracture is increased for women who suffer a wrist fracture (RR 1.43). Resources and preventative measures should be targeted towards these high risk patients to prevent the catastrophic event of a hip fracture. This meta analysis confirms and quantifies the increased relative risk of hip fracture after wrist fracture in women.