



Selección de Resúmenes de Menopausia

Semana del 24 al 30 de Agosto, 2016

Juan Enrique Blümel. Departamento Medicina Sur. Universidad de Chile

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Effects of Hormone Therapy on Oxidative Stress in Postmenopausal Women with Metabolic Syndrome.

Sánchez-Rodríguez MA, Zacarías-Flores M, Castrejón-Delgado L, Ruiz-Rodríguez AK, Mendoza-Núñez VM.

The aim of this study was to determine the effect of oral hormone therapy (HT) on oxidative stress (OS) in postmenopausal women with metabolic syndrome (MetS). A randomized, double blind, placebo-controlled trial was carried out. We formed four groups of 25 women each; healthy (HW) and MetS women (MSW) were assigned to HT (1 mg/day of estradiol valerate plus 5 mg/10 day of medroxyprogesterone) or placebo. We measured plasma lipoperoxides, erythrocyte superoxide dismutase and glutathione peroxidase, total plasma antioxidant status and uric acid, as OS markers. Alternative cut-off values of each parameter were defined and a stress score (SS) ranging from 0 to 7 was used as total OS. MetS was defined according to National Cholesterol Education Program Adult Treatment Panel III (NCEP-ATPIII) criteria. Participants were seen at baseline, 3 and 6 months. After 6 months, MetS decreased in MSW-HT (48%), their triglycerides and high-density lipoprotein cholesterol (HDL-c) improved; in the other groups no difference was found. SS in MSW-HT decreased (3.8 ± 0.3 to 1.7 ± 0.3 , $p < 0.05$) and OS was also reduced (44%), this effect was evident since 3 mo. HW-HT with high OS also decreased (40%). In placebo groups there was no change. Our findings suggest that HT improve lipids and OS associated to MetS in postmenopausal women.

Am J Epidemiol. 2016 Aug 23. pii: kww448. [Epub ahead of print]

Associations of Premenopausal Hysterectomy and Oophorectomy With Breast Cancer Among Black and White Women: The Carolina Breast Cancer Study, 1993-2001.

Robinson WR, Nichols HB, Tse CK, Olshan AF, Troester MA.

Black women experience higher rates of hysterectomy than other women in the United States. Although research indicates that premenopausal hysterectomy with bilateral oophorectomy decreases the risk of breast cancer in black women, it remains unclear how hysterectomy without ovary removal affects risk, whether menopausal hormone therapy use attenuates inverse associations, and whether associations vary by cancer subtype. In the population-based, case-control Carolina Breast Cancer Study of invasive breast cancer in 1,391 black (725 cases, 666 controls) and 1,727 white (939 cases, 788 controls) women in North Carolina (1993-2001), we investigated the associations of premenopausal hysterectomy and oophorectomy with breast cancer risk. Compared with no history of premenopausal surgery, bilateral oophorectomy and hysterectomy without oophorectomy were associated with lower odds of breast cancer (for bilateral oophorectomy, multivariable-adjusted odds ratios = 0.60, 95% confidence interval: 0.47, 0.77; for hysterectomy without oophorectomy, multivariable-adjusted odds ratios = 0.68, 95% confidence interval: 0.55, 0.84). Estimates did not vary by race and were similar for hormone receptor-positive and hormone receptor-negative cancers. Use of estrogen-only menopausal hormone therapy did not attenuate the associations. Premenopausal hysterectomy, even without ovary removal, may reduce the long-term risk of hormone receptor-positive and hormone receptor-negative breast cancers. Varying rates of hysterectomy are a potentially important contributor to differences in breast cancer incidence among racial/ethnic groups.

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Circulating microRNA signatures in patients with idiopathic and postmenopausal osteoporosis and fragility fractures.

Kocijan R, Muschitz C, Geiger E, Skalicky S, Baierl A, Dormann R, Plachel F, Feichtinger X, Heimel P, Fahrleitner-Pammer A, Grillari J, Redl H, Resch H, Hackl M.

CONTEXT: Established bone turnover markers (BTM) do not reflect fracture risk in idiopathic male and premenopausal osteoporosis and the role of microRNAs (miRNAs) in these patients is currently unclear. miRNAs are a class of small non-coding RNAs that regulate gene expression and bone tissue homeostasis. They are considered a new class of endocrine regulators with promising potential as biomarkers. **OBJECTIVE:** Evaluation of circulating miRNA signatures in male and female subjects with idiopathic and postmenopausal osteoporotic low-traumatic fractures. **DESIGN & SETTING:** Case-control study, cross-sectional design **Patients:** 36 patients with prevalent low-traumatic fractures and 39 control subjects **Interventions:** None **Main Outcome Measures:** 187 miRNAs were quantified in serum by quantitative PCR, compared between groups and correlated to established BTMs. **RESULTS:** Significant differences in serum levels of circulating miRNAs were identified in all three subgroups (46 in premenopausal, 52 in postmenopausal, 55 in male). A set of 19 miRNAs was consistently regulated in all three subgroups. Eight miRNAs (miR-152-3p, miR-30e-5p, miR-140-5p, miR-324-3p, miR-19b-3p, miR-335-5p, miR-19a-3p, miR-550a-3p) were excellent discriminators of patients with low-traumatic fractures, regardless of age and gender, with AUC-values > 0.9. The 11 remaining miRNAs showed AUC values between 0.81 and 0.89. Correlation analysis identified significant correlations between miR-29b-3p and PINP, and miR-365-5p and iPTH, TRAP5b, PINP and Osteocalcin, as well as BMDL1-L4 and miR-19b-3p, miR-324-3p, miR-532-5p, and miR-93-5p. **CONCLUSIONS:** Specific serum miRNA profiles are strongly related to bone pathologies. Therefore miRNAs might be directly linked to bone tissue homeostasis. In particular, miR-29b-3p has previously been reported as regulator of osteogenic differentiation and could serve as a novel marker of bone turnover in osteoporotic patients as a member of a miRNA signature.

Menopause. 2016 Aug 22. [Epub ahead of print]

Depressive symptoms across the menopause transition: findings from a large population-based cohort study.

Hickey M, Schoenaker DA, Joffe H, Mishra GD.

OBJECTIVE: The aim of the study was to describe the trajectories of depressive symptoms in a large population-based cohort of midaged women, and to examine the associations of current and changing reproductive stage with depressive symptoms over time. **METHODS:** Prospective, population-based cohort study of 13,715 women aged 45 to 50 years followed up for over 15 years (Australian Longitudinal Study on Women's Health). Nearly 6,000 women provided complete data for this study. Menopause status was determined from questionnaires about hysterectomy, oophorectomy, hormone therapy, and menstrual patterns. Depressive symptoms were measured using the Center for Epidemiologic Studies Depression scale (CESD-10). **RESULTS:** Latent class analysis indicated four distinct profiles of CESD-10 scores over 15 years: stable low (80.0%), increasing (9.0%), decreasing (8.5%), and stable high (2.5%). Those with "increasing" depressive symptoms were more likely to have had bilateral salpingo-oophorectomy or be perimenopausal at baseline compared with women in the "stable low" group. Depressive symptoms were higher in perimenopausal women, (higher CESD-10 score of 0.19, 95% CI 0.02, 0.31), after hysterectomy alone (0.53, 95% CI 0.31, 0.74), bilateral salpingo-oophorectomy with/without hysterectomy (0.85, 95% CI 0.58, 1.12), hormone therapy users (0.19, 95% CI 0.01, 0.36), and after starting or stopping hormone therapy compared with postmenopausal women (adjusted for sociodemographic factors, vasomotor symptoms, health behaviors, and history of depression diagnosis or treatment). **CONCLUSIONS:** Depressive symptoms follow distinct trajectories across the menopause transition. Most women have stable symptoms, but around 9% have increasing symptoms and a similar proportion (8.5%) decreasing symptoms. Increasing depressive symptoms were independent of vasomotor symptoms but were associated with oophorectomy and stopping or starting hormone therapy. A large number of women were excluded due to missing data, and thus the results should be interpreted with caution.

Brain Behav. 2016 May 18;6(8):e00489. doi: 10.1002/brb3.489. eCollection 2016.

Bone density and depressive disorder: a meta-analysis.

Schweiger JU, Schweiger U, Hüppe M, Kahl KG, Greggersen W, Fassbinder E.

BACKGROUND: The aim of this study was to evaluate the evidence of low bone mineral density (BMD) in depression. Low BMD is a major risk factor for osteoporotic fractures and frailty. **METHODS:** The searched database was Pubmed, Meta-analysis included human studies in men and women fulfilling the following criteria: (1) assessment of BMD in the lumbar spine, the femur or the total hip; (2) comparison of BMD between depressed individuals and the healthy control group; (3) measurement of BMD using dual-energy X-ray absorptiometry (DEXA); and (4) data on the mean, standard deviation, or standard error of BMD. **RESULTS:** Twenty-one studies

were identified, encompassing 1842 depressed and 17,401 nondepressed individuals. Significant negative composite weighted mean effect sizes were identified for the lumbar spine ($d = -0.15$, 95%CL -0.22 to -0.08), femur ($d = -0.34$, 95%CL -0.64 to -0.05), and total hip ($d = -0.14$, 95%CL -0.23 to -0.05) indicating low BMD in depression. Examining men and women shows low bone density in the lumbar spine and femur in women and low bone density in the hip in men. The differences between men and women with MDD and the comparison group tended to be higher when examined by expert interviewers. Low bone density was found in all age groups. **CONCLUSIONS:** Bone mineral density is reduced in patients with depressive disorders. The studies provide little evidence for potential relevant mediating factors.

Lasers Surg Med. 2016 Aug 22. doi: 10.1002/lsm.22569. [Epub ahead of print]

Efficacy of Erbium:YAG laser treatment compared to topical estriol treatment for symptoms of genitourinary syndrome of menopause.

Gaspar A, Brandi H, Gomez V, Luque D.

OBJECTIVES: The objective of this prospective comparative cohort study was to establish the effectiveness and safety of Erbium:YAG (Er:YAG) laser treatment for genitourinary syndrome of menopause and to compare it with an established topical estriol treatment. **METHODS:** Fifty patients with genitourinary syndrome of menopause were divided into two groups. The estriol group received a treatment of 0.5 mg estriol ovules for 8 weeks and the laser group was first treated for 2 weeks with 0.5 mg estriol ovules 3 times per week to hydrate the mucosa and then received three sessions with 2,940 nm Er:YAG laser in non-ablative mode. Biopsies were taken before and at 1, 3, 6, and 12 months post-treatment. Maturation index, maturation value and pH were recorded up to 12-months post-treatment, while the VAS analysis of symptoms was recorded up to 18 months post-treatment. **RESULTS:** Statistically significant ($P < 0.05$), reduction of all assessed symptoms was observed in the laser group at all follow-ups up to 18 months post-treatment. Significant improvement in maturation value and a decrease of pH in the laser group was detected up to 12 months after treatment. The improvement in all endpoints was more pronounced and longer lasting in the laser group. Histological examination showed changes in the tropism of the vaginal mucosa and also angiogenesis, congestion, and restructuring of the lamina propria in the laser group. Side effects were minimal and of transient nature in both groups, affecting 4% of patients in the laser group and 12% of patients in the estriol group. **CONCLUSIONS:** Our results show that Er:YAG laser treatment successfully relieves symptoms of genitourinary syndrome of menopause and that the results are more pronounced and longer lasting compared to topical estriol treatment. Lasers Surg. Med. © 2016. The Authors. Lasers in Surgery and Medicine Published by Wiley Periodicals, Inc.