 **Selección de Resúmenes de Menopausia**

Semana del 22 al 28 de Octubre de 2014

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**Ther Adv Musculoskelet Dis. 2014 Oct;6(5):185-202. doi: 10.1177/1759720X14546350.**

**Medication-induced osteoporosis: screening and treatment strategies.**

Panday K, Gona A, Humphrey MB.

Drug-induced osteoporosis is a significant health problem and many physicians are unaware that many commonly prescribed medications contribute to significant bone loss and fractures. In addition to glucocorticoids, proton pump inhibitors, selective serotonin receptor inhibitors, thiazolidinediones, anticonvulsants, medroxyprogesterone acetate, aromatase inhibitors, androgen deprivation therapy, heparin, calcineurin inhibitors, and some chemotherapies have deleterious effects on bone health. Furthermore, many patients are treated with combinations of these medications, possibly compounding the harmful effects of these drugs. Increasing physician awareness of these side effects will allow for monitoring of bone health and therapeutic interventions to prevent or treat drug-induced osteoporosis.

**Cancer Epidemiol Biomarkers Prev. 2014 Oct 23. pii: cebp.0722.2014. [Epub ahead of print]**

**Effect of exercise on insulin sensitivity in healthy postmenopausal women: the SHAPE study.**

van Gemert WA, Monninkhof EM, May AM, Peeters PH, Schuit AJ.

Background An inactive lifestyle is a risk factor for several types of cancer. A proposed pathway through which exercise influences cancer risk is via insulin. We aim to investigate the effect of a one-year exercise intervention on insulin sensitivity, and the role of body fat in this association, in healthy, normal to overweight/obese, postmenopausal women. Methods In the SHAPE study, 189 healthy, inactive and postmenopausal women (aged 50-69, BMI 22-40 kg/m2) were randomly assigned to a one-year aerobic and strength exercise intervention (150 min/week), or a control group. Between group differences in fasting insulin, glucose and homeostatic model assessment of insulin resistance (HOMA2) over time were estimated using linear mixed models. Results Follow-up measurements of insulin sensitivity were available for 181 (95.8%) and 182 (96.3%) women at 4 and 12 months, respectively. The intention to treat analysis showed no significant differences between the two study groups (treatment effect ratio of the exercise group versus control (β) [95% confidence interval]): insulin, β=1.07 [0.96-1.19]; glucose, β=1.01 [0.99-1.02]; HOMA2, β=1.07 [0.96-1.20]). Similar results were found in a per protocol analysis in compliant women, and in a subgroup of women who lost >2% body fat (measured by DEXA). Conclusions Participation in a one-year aerobic and strength exercise intervention programme did not result in changes in insulin sensitivity in healthy postmenopausal and inactive women. Impact Our findings suggest that 150 minutes/week of exercise, as recommended by current guidelines, is not enough to achieve improvements in insulin sensitivity and subsequent cancer risk, in healthy postmenopausal women.

**PLoS One. 2014 Oct 23;9(10):e110437. doi: 10.1371/journal.pone.0110437. eCollection 2014.**

**Duration of Thyroid Dysfunction Correlates with All-Cause Mortality. The OPENTHYRO Register Cohort.**

Laulund AS, Nybo M, Brix TH, Abrahamsen B, Jørgensen HL, Hegedüs L.

INTRODUCTION AND AIM: The association between thyroid dysfunction and mortality is controversial. Moreover, the impact of duration of thyroid dysfunction is unclarified. Our aim was to investigate the correlation between biochemically assessed thyroid function as well as dysfunction duration and mortality. METHODS: Register-based follow-up study of 239,768 individuals with a serum TSH measurement from hospitals and/or general practice in Funen, Denmark. Measurements were performed at a single laboratory from January 1st 1995 to January 1st 2011. Cox regression was used for mortality analyses and Charlson Comorbidity Index (CCI) was used as comorbidity score. RESULTS: Hazard ratios (HR) with 95% confidence intervals (CI) for mortality with decreased (<0.3 mIU/L) or elevated (>4.0 mIU/L) levels of TSH were 2.22; 2.14-2.30; P<0.0001 and 1.28; 1.22-1.35; P<0.0001, respectively. Adjusting for age, gender, CCI and diagnostic setting attenuated the risk estimates (HR 1.23; 95% CI: 1.19-1.28; P<0.0001, mean follow-up time 7.7 years, and HR 1.07; 95% CI: 1.02-1.13; P = 0.004, mean follow-up time 7.2 years) for decreased and elevated values of TSH, respectively. Mortality risk increased by a factor 1.09; 95% CI: 1.08-1.10; P<0.0001 or by a factor 1.03; 95% CI: 1.02-1.04; P<0.0001 for each six months a patient suffered from decreased or elevated TSH, respectively. Subdividing according to degree of thyroid dysfunction, overt hyperthyroidism (HRovert 1.12; 95% CI: 1.06-1.19; P<0.0001), subclinical hyperthyroidism (HRsubclinical 1.09; 95% CI: 1.02-1.17; P = 0.02) and overt hypothyroidism (HRovert 1.57; 95% CI: 1.34-1.83; P<0.0001), but not subclinical hypothyroidism (HRsubclinical 1.03; 95% CI: 0.97-1.09; P = 0.4) were associated with increased mortality. CONCLUSIONS AND RELEVANCE: In a large-scale, population-based cohort with long-term follow-up (median 7.4 years), overt and subclinical hyperthyroidism and overt but not subclinical hypothyroidism were associated with increased mortality. Excess mortality with increasing duration of decreased or elevated serum TSH suggests the importance of timely intervention in individuals with thyroid dysfunction.

**Afr J Med Med Sci. 2014 Mar;43(1):49-57.**

**Antioxidant status and reproductive hormones in women during reproductive, perimenopausal and postmenopausal phase of life.**

Ogunro PS, Bolarinde AA, Owa OO, Salawu AA, Oshodi AA.

BACKGROUND: Reproductive aging resulting in menopause with permanent cessation of ovarian follicular activity. The progressive loss of estrogen and its protective effects, combined with deficient endogenous antioxidant results in oxidative stress. OBJECTIVE: To assess the level of oxidative stress and its relationship with reproductive hormones at various developmental phases of women. METHODS: A total of 186 (65 in Reproductive, 58 in Perimenopausal, and 63 in Postmenopausal phase) participants between the ages of 20-60 years were recruited for the study. Follicle-stimulating hormone (FSH), luteinizing hormone (LH), progesterone, estradiol, total antioxidant status (TAS), malondialdehyde (MDA) and reduced glutathione (GSH); activities of glutathione peroxidase (GSH-Px), superoxide dismutase (SOD) and catalase (CAT) levels were all determined. RESULTS: FSH, LH and MDA levels were significantly increased during perimenopausal and postmenopausal phases compared to reproductive phase; however, estradiol, progesterone, TAS and GSH levels were significantly decreased during perimenopausal and postmenopausal phases compared to reproductive phase. The erythrocyte activities of GSH-Px, SOD and CAT were significantly decreased during perimenopausal and postmenopausal phases compared to reproductive phase. It was observed that MDA showed positive correlation with LH and FSH while a negative correlation with estradiol and progesterone was observed; whereas, antioxidants showed negative correlation with LH and FSH while a positive correlation with estradiol and progesterone. CONCLUSION: The present study revealed that normal perimenopausal and postmenopausal phase are associated with oxidative stress. Therefore it may be of benefit when both phases are being managed in term of hormonal deficit if antioxidant is an adjunct.

**Climacteric. 2014 Oct 21:1-12. [Epub ahead of print]**

**Ultra-low dose - new approaches in menopausal hormone therapy.**

Stute P, Becker HG, Bitzer J, Chatsiproios D, Luzuy F, von Wolff M, Wunder D, Birkhäuser M.

ABSTRACT Despite increasing life expectancy, the age of natural menopause onset has not significantly changed in recent decades. Thus women spend about one third of their lives in an estrogen deficient state if untreated. There is a need for appropriate treatment of acute symptoms and prevention of chronic estrogen deficiency sequelae. International guidelines call for the use of the lowest effective hormone dosage for vasomotor symptom relief, the major indication for menopausal hormone therapy (MHT). In 2011, an oral continuous-combined ultra-low dose (ULD) MHT was approved in Switzerland. This publication elaborated by eight national menopause specialists intends to review the advantages and disadvantages of ULD MHT after the first years of its general use in Switzerland. It concludes that, for many women, ULD MHT may be sufficient to decrease vasomotor symptoms, but not necessarily to guarantee fracture prevention.

**Menopause. 2014 Oct 20. [Epub ahead of print]**

**Hormone therapy and risk of cardiovascular outcomes and mortality in women treated with statins.**

Berglind IA1, Andersen M, Citarella A, Linder M, Sundström A, Kieler H.

Objective: This work aims to study the effects of hormone therapy (HT) on the risk of cardiovascular outcomes and all-cause mortality in women treated with statins. Methods: We included women aged 40 to 74 years and living in Sweden who filled a first statin prescription between 2006 and 2007. Women were categorized as HT users or as nonusers. Information on dispensed drugs, comorbidity, cardiovascular outcomes, and all-cause mortality was obtained from national health registers. Results: A total of 40,958 statin users-2,862 (7%) HT users and 38,096 nonusers-were followed for a mean of 4.0 years. In total, 70% of the women used statins as primary prevention. Among HT users, there were five cardiovascular deaths per 10,000 person-years. The corresponding rate among nonusers was 18, which yielded a hazard ratio of 0.38 (95% CI, 0.12-1.19). The all-cause mortality rates were 33 and 87, respectively, and the hazard ratio was 0.53 (95% CI, 0.34-0.81). There were no associations with cardiovascular events. A similar pattern was found for both primary and secondary prevention. Conclusions: HT is associated with a reduced risk of all-cause mortality in women treated with statins. Although confounding factors, such as lifestyle and disease severity, might have influenced the results, HT does not seem to be detrimental to statin-treated women.

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**Sexual function after fractional microablative CO2 laser in women with vulvovaginal atrophy.**

Salvatore S, Nappi RE, Parma M, Chionna R, Lagona F, Zerbinati N, Ferrero S, Origoni M, Candiani M, et al.

ABSTRACT Objective: To investigate the effects of fractional CO2 laser on sexual function and overall satisfaction with sexual life in postmenopausal women with vulvo-vaginal atrophy (VVA). Methods: This prospective study included 77 postmenopausal women (mean age: 60.6 ± 6.2 years) treated for VVA symptoms with fractional microablative CO2 laser system (SmartXide2 V2LR, Monalisa Touch, DEKA, Florence, Italy). Sexual function and quality of life (QoL) were evaluated with the Female Sexual Function Index (FSFI) and the Short Form 12 (SF-12) respectively both at baseline and at 12-week follow-up. A 10-mm visual analogue scale (VAS) was used to measure the overall satisfaction with sexual life and the intensity of VVA symptoms (vaginal burning, vaginal itching, vaginal dryness, dyspareunia and dysuria) before and after the study period. Results: we observed a significant improvement in the total and each specific domain FSFI scores at 12-week follow-up compared to baseline (p < 0.001). After concluding the laser treatment the overall satisfaction with sexual life significantly improved (p<0.001). Seventeen (85%) out of 20 (26%) women not sexually active for VVA severity at baseline, regained a normal sexual life at 12-week follow-up. Finally, we also found a significant improvement in each VVA symptom (p<0.001) and in QoL evaluation, both for the physical (p=0.013) and mental (p=0.002) domains' scores. Conclusions: Fractional microablative CO2 laser is associated with a significant improvement of sexual function and satisfaction with sexual life in postmenopausal women with VVA symptoms.

**Eur J Prev Cardiol. 2014 Oct 20. pii: 2047487314556004. [Epub ahead of print]**

**Cardiovascular disease risk in women with premature ovarian insufficiency: A systematic review and meta-analysis.**

Dutch Multidisciplinary Guideline Development Group on Cardiovascular Risk Management Reproductive Disorders.

AIMS: The purpose of this review was to assess the relationship between premature ovarian insufficiency (POI), defined as natural menopause <40 years, and risk of ischaemic heart disease (IHD), stroke and overall cardiovascular disease (CVD). METHODS AND RESULTS: We performed a systematic search in PubMed (1966-2012), EMBASE (1980-2012). Studies were included if they were prospective, follow-up>3 years, assessment of age menopause <40 years, and incident cases of fatal or nonfatal IHD, stroke, or overall CVD. Relative risks (RRs) and 95% confidence interval (CI) were pooled using a random-effect model. Overall, 10 observational studies were identified, comprising 190,588 women (follow-up 4-37 years) with 9440 events (2026 events for IHD (seven studies) and 6438 events for stroke (seven studies) and 976 for total CVD (two studies). POI was assessed by questionnaire and incident cases through certification and event registers. POI was related to an increased risk of developing or dying from IHD (hazard ratio (HR) 1.69, 95% CI 1.29-2.21, p = 0.0001) and total CVD (HR 1.61, 95% CI 1.22-2.12, p = 0.0007). No relation was found for stroke (HR 1.03, 0.88-1.19, p = 0.74). We found no evidence for heterogeneity. CONCLUSION: POI is an independent though modest risk factor of IHD and overall CVD but not of stroke. Because of the limited impact of POI on CVD risk compared to classical cardiovascular risk factors, it is unlikely that POI will be implemented as modifier of cardiovascular risk classification.