



## Selección de Resúmenes de Menopausia

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**Prz Menopausalny. 2016 Jun;15(2):81-4. doi: 10.5114/pm.2016.61189. Epub 2016 Jul 22.**

### **Relation between visceral fat and carotid intimal media thickness in Mexican postmenopausal women: a preliminary report.**

Carranza-Lira S, Azpilcueta YM, Ortiz SR.

**AIM OF THE STUDY:** To investigate the relationship between visceral fat and carotid IMT (intima media thickness) in Mexican postmenopausal women. **MATERIAL AND METHODS:** In 71 postmenopausal women divided in two groups: group 1,  $IMT > 1$  mm and group 2,  $IMT \leq 1$  mm, blood pressure, body mass index (BMI), waist hip ratio (WHR), visceral and subcutaneous fats and carotid IMT were analyzed. Descriptive statistics were used and the comparison among those with abnormal and normal IMT was carried out using Mann-Whitney U test; also Spearman's correlation analysis was done. **RESULTS:** When comparing group 1 ( $n = 9$ , 12.7%) with group 2 ( $n = 62$ , 87.3%), it was found that the subcutaneous fat, visceral fat and systolic blood pressure were significantly greater in group 1 ( $p < 0.018$ ,  $p < 0.001$  and  $p < 0.006$ , respectively), and also in this group there was a correlation between BMI and subcutaneous fat ( $\rho = 0.686$ ,  $p < 0.041$ ) and between visceral fat and the systolic blood pressure ( $\rho = 0.712$ ,  $p < 0.031$ ). In group 2, there was a correlation between IMT and diastolic blood pressure ( $\rho = 0.251$ ,  $p < 0.049$ ). **CONCLUSION:** Subcutaneous and visceral fat have an unfavorable effect in the carotid IMT and in blood pressure.

**Climacteric. 2016 Sep 2:1-2. [Epub ahead of print]**

### **Circadian rhythm and menopause.**

Pines A.

Circadian rhythm is an internal biological clock which initiates and monitors various physiological processes with a fixed time-related schedule. The master circadian pacemaker is located in the suprachiasmatic nucleus in the hypothalamus. The circadian clock undergoes significant changes throughout the life span, at both the physiological and molecular levels. This cyclical physiological process, which is very complex and multifactorial, may be associated with metabolic alterations, atherosclerosis, impaired cognition, mood disturbances and even development of cancer. Sex differences do exist, and the well-known sleep disturbances associated with menopause are a good example. Circadian rhythm was detected in the daily pattern of hot flushes, with a peak in the afternoons. Endogenous secretion of melatonin decreases with aging across genders, and, among women, menopause is associated with a significant reduction of melatonin levels, affecting sleep. Although it might seem that hot flushes and melatonin secretion are likely related, there are not enough data to support such a hypothesis.

**Bonekey Rep. 2016 Jul 20;5:826. doi: 10.1038/bonekey.2016.48. eCollection 2016.**

### **Effects of myokines on bone.**

Kaji H.

The links between muscle and bone have been recently examined because of the increasing number of patients with osteoporosis and sarcopenia. Myokines are skeletal muscle-derived humoral cytokines and growth factors, which exert physiological and pathological functions in various distant organs, including the regulation of glucose, energy and bone metabolism. Myostatin is a crucial myokine, the expression of which is mainly limited to muscle tissues. The inhibition of myostatin signaling increases bone remodeling, bone mass and muscle mass, and it may provide a target for the treatment of both sarcopenia and osteoporosis. As myostatin is involved in osteoclast formation and bone destruction in rheumatoid arthritis, myostatin may be a target myokine for the treatment of accelerated bone resorption and joint destruction in rheumatoid arthritis. Numerous other myokines, including transforming growth factor- $\beta$ , follistatin, insulin-like growth factor-I, fibroblast growth factor-2, osteoglycin, FAM5C, irisin, interleukin (IL)-6, leukemia inhibitory factor, IL-7, IL-15, monocyte chemoattractant protein-1, ciliary neurotrophic factor, osteonectin and matrix metalloproteinase 2, also affect bone cells in various manners. However, the effects of myokines on bone metabolism are largely unknown. Further research is expected to clarify the interaction between

muscle and bone, which may lead to greater diagnosis and the development of the treatment for muscle and bone disorders, such as osteoporosis and sarcopenia.

**J Clin Lipidol. 2016 Jul-Aug;10(4):962-9. doi: 10.1016/j.jacl.2016.04.008. Epub 2016 Apr 26.**

### **Increase HDL-C level over the menopausal transition is associated with greater atherosclerotic progression.**

El Khoudary SR, Wang L, Brooks MM, Thurston RC, Derby CA, Matthews KA.

**BACKGROUND:** Experimental and observational evidence demonstrates that high-density lipoprotein (HDL) can lose its well-documented atheroprotective functions and even adopt a paradoxically proinflammatory nature in certain conditions. Hormonal alterations, especially estradiol reduction, influence the accumulation of risk factors that could potentially impair the quality of HDL during the menopausal transition (MT). Limited data exist to evaluate the relationship between changes in HDL-cholesterol (HDL-C) and its main carried protein, apolipoprotein A (apoA), over the MT, and atherosclerosis development. **OBJECTIVE:** To evaluate the associations of changes in HDL-C and apoA with progression of carotid intima-media thickness (cIMT), carotid adventitial diameter (cAD), and presence of carotid plaque relative to the onset of the postmenopause. **METHODS:** A total of 213 participants (age [mean (SD)]: 45.7 [2.5] years at baseline; 70% white) from the Study of Women's Health Across the Nation Pittsburgh site were included. Participants had up to 5 measures of cIMT, cAD, and carotid plaque over a maximum of 9 years of follow-up. **RESULTS:** Adjusting for sociodemographic, cardiovascular disease risk factors, cardiovascular disease medication use, and C-reactive protein, a larger increase in HDL-C since baseline was significantly associated with a greater cIMT progression ( $P = .008$ ). Additionally, a higher apoA level at baseline was significantly associated with a lower cIMT progression ( $P = .03$ ). No significant associations were found with cAD or plaque presence. **CONCLUSIONS:** As women transition through menopause, increases in HDL-C levels are independently associated with greater cIMT progression. Thus, the quality of HDL may be altered over the MT rendering HDL dysfunctional and not providing the expected cardioprotective effect.

**Osteoporos Int. 2016 Aug 30. [Epub ahead of print]**

### **A meta-analysis of breastfeeding and osteoporotic fracture risk in the females.**

Duan X, Wang J, Jiang X.

**INTRODUCTION:** Several epidemiologic studies have investigated that breastfeeding is associated with short-term bone loss in the women, but the long-term effect on osteoporotic fracture risk remains unclear. Thus, we conducted this meta-analysis to explore the potential association between breastfeeding and osteoporotic fracture risk in the females and possible dose-response relationship between them. **RESULTS:** Twelve articles including 14,954 participants were identified. The pooled RRs of osteoporotic hip and forearm fracture for the highest vs lowest duration of breastfeeding were 0.84 (95 % CI 0.67-1.05), 0.72 (95 % CI 0.52-0.99), and 0.82 (95 % CI 0.56-1.19), respectively. In subgroup analysis, breastfeeding was associated with a decreased risk of osteoporotic fracture in case-control study (RR = 0.70, 95 % CI 0.49-0.99) and postmenopausal women (RR = 0.66, 95 % CI 0.47-0.93). In dose-response analysis, osteoporotic and hip fracture risk decreased by 0.9 and 1.2 % for each month increment of breastfeeding, respectively. **CONCLUSIONS:** Our meta-analysis revealed that breastfeeding may well reduce the risk of osteoporotic fracture. More cohort studies with large sample sizes are needed to confirm the conclusion.

**Cochrane Database Syst Rev. 2016 Aug 31;8:CD001500. doi: 10.1002/14651858.CD001500.pub3.**

### **Local oestrogen for vaginal atrophy in postmenopausal women.**

Lethaby A, Ayeleke RO, Roberts H.

**BACKGROUND:** Vaginal atrophy is a frequent complaint of postmenopausal women; symptoms include vaginal dryness, itching, discomfort and painful intercourse. An alternative choice is oestrogenic preparations administered vaginally (in the form of creams, pessaries, tablets and the oestradiol-releasing ring). **OBJECTIVES:** The objective of this review was to compare the efficacy and safety of intra-vaginal oestrogenic preparations in relieving the symptoms of vaginal atrophy in postmenopausal women. **SELECTION CRITERIA:** The inclusion criteria were randomised comparisons of oestrogenic preparations administered intravaginally in postmenopausal women for at least 12 weeks for the treatment of symptoms resulting from vaginal atrophy or vaginitis. **MAIN RESULTS:** We included 30 RCTs (6235 women) comparing different intra-vaginal oestrogenic preparations with each other and

with placebo. Oestrogen ring versus other regimens; other regimens included oestrogen cream, oestrogen tablets and placebo. There was no evidence of a difference in improvement in symptoms (participant assessment) either between oestrogen ring and oestrogen cream (odds ratio (OR) 1.33, 95% CI 0.80 to 2.19, two RCTs, n = 341, I(2) = 0%, low-quality evidence) or between oestrogen ring and oestrogen tablets (OR 0.78, 95% CI 0.53 to 1.15, three RCTs, n = 567, I(2) = 0%, low-quality evidence). However, a higher proportion of women reported improvement in symptoms following treatment with oestrogen ring compared with placebo (OR 12.67, 95% CI 3.23 to 49.66, one RCT, n = 67). With respect to endometrial thickness, a higher proportion of women who received oestrogen cream showed evidence of increase in endometrial thickness compared to those who were treated with oestrogen ring (OR 0.36, 95% CI 0.14 to 0.94, two RCTs, n = 273; I(2) = 0%, low-quality evidence). This may have been due to the higher doses of cream used.

2. Oestrogen tablets versus other regimens Other regimens in this comparison included oestrogen cream, and placebo. There was no evidence of a difference in the proportions of women who reported improvement in symptoms between oestrogen tablets and oestrogen cream (OR 1.06, 95% CI 0.55 to 2.01, two RCTs, n = 208, I(2) = 0% low-quality evidence). A higher proportion of women who were treated with oestrogen tablets reported improvement in symptoms compared to those who received placebo using a fixed-effect model (OR 12.47, 95% CI 9.81 to 15.84, two RCTs, n = 1638, I(2) = 83%, low-quality evidence); however, using a random-effect model did not demonstrate any evidence of a difference in the proportions of women who reported improvement between the two treatment groups (OR 5.80, 95% CI 0.88 to 38.29). There was no evidence of a difference in the proportions of women with increase in endometrial thickness between oestrogen tablets and oestrogen cream (OR 0.31, 95% CI 0.06 to 1.60, two RCTs, n = 151, I(2) = 0%, low-quality evidence).

3. Oestrogen cream versus other regimens Other regimens identified in this comparison included isoflavone gel and placebo. There was no evidence of a difference in the proportions of women with improvement in symptoms between oestrogen cream and isoflavone gel (OR 2.08, 95% CI 0.08 to 53.76, one RCT, n = 50, low-quality evidence). However, there was evidence of a difference in the proportions of women with improvement in symptoms between oestrogen cream and placebo with more women who received oestrogen cream reporting improvement in symptoms compared to those who were treated with placebo (OR 4.10, 95% CI 1.88 to 8.93, two RCTs, n = 198, I(2) = 50%, low-quality evidence). None of the included studies in this comparison reported data on endometrial thickness.

**AUTHORS' CONCLUSIONS:** There was no evidence of a difference in efficacy between the various intravaginal oestrogenic preparations when compared with each other. However, there was low-quality evidence that intra-vaginal oestrogenic preparations improve the symptoms of vaginal atrophy in postmenopausal women when compared to placebo. There was low-quality evidence that oestrogen cream may be associated with an increase in endometrial thickness compared to oestrogen ring; this may have been due to the higher doses of cream used. No evidence of a difference in the overall body of evidence in adverse events between the various oestrogenic preparations compared with each other or with placebo.

**Menopause. 2016 Aug 29. [Epub ahead of print]**

## **Knowledge of clinical trials regarding hormone therapy and likelihood of prescribing hormone therapy.**

Taylor HS, Kagan R, Altomare CJ, Cort S, Bushmakin AG, Abraham L.

**OBJECTIVE:** The aim of the study was to examine whether physicians who are better informed about large, published hormone therapy (HT) trials (eg, the Women's Health Initiative) are more likely to prescribe HT for menopausal symptoms. **METHODS:** US obstetricians/gynecologists and primary care physicians completed a 15- to 20-minute Internet-based survey. Knowledge was assessed via nine true-false statements about HT trials (range: 0-9). Prescribing practices were assessed via six case studies with a seven-point response scale of "extremely unlikely" to "extremely likely" in relation to treatment options (range: 6-42). The primary analysis examined the correlation between HT trial knowledge and likelihood of prescribing HT. Secondary analyses gauged knowledge and prescribing practices based on practice type, sex, and years in practice. **RESULTS:** Among 501 physicians who completed the survey (representing 10.7% of those invited; median age: 51.0 y; female: 26.9%; obstetricians/gynecologists: 49.9%; median 19.0 y in practice), HT knowledge (mean [SD] 3.8 [2.3]), and prescribing (mean [SD] 24.5 [5.6]) exhibited a statistically significant, moderate positive correlation (0.30; 95% CI, 0.21-0.37;  $P < 0.0001$ ). Obstetricians/gynecologists were significantly ( $P < 0.0001$ ) more knowledgeable and more likely to prescribe HT than primary care physicians. Male physicians were more likely ( $P < 0.05$ ) to prescribe HT but not more knowledgeable about it than female physicians. Knowledge (but not likelihood of prescribing) significantly increased as a function of years in practice. **CONCLUSIONS:** Physicians who are more knowledgeable about large, published HT trials are more likely to prescribe HT for menopausal symptoms.

