



## Selección de Resúmenes de Menopausia

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María Soledad Vallejo. Clínica Quilín. Universidad de Chile

**Maturitas.. 2022 Jul;161:18-26. doi: 10.1016/j.maturitas.2022.01.012. Epub 2022 Feb 2. (-20)**

### **Impact of micronised progesterone and medroxyprogesterone acetate in combination with transdermal oestradiol on cardiovascular markers in women diagnosed with premature ovarian insufficiency or an early menopause: a randomised pilot trial**

Monica Mittal, Carmel McEniery, Prasanna Raj Supramaniam, Linda Cardozo, Mike Savvas, Nick Panay, H Hamoda  
 Objective: To compare the difference between micronised progesterone (MP) and medroxyprogesterone acetate (MPA) in combination with transdermal oestradiol (t-E2) on cardiovascular disease (CVD) risk markers in women diagnosed with an early menopause and premature ovarian insufficiency (EMPOI).Background: The European Society for Cardiology has identified carotid femoral pulse wave velocity (cfPWV) as the gold standard cardiogenic biomarker for risk stratification of arterial disease. Menopause has been shown to augment the age-dependent increase in arterial stiffness, with hormone replacement therapy (HRT) being the mainstay of management of women diagnosed with EMPOI. Study design: A pilot randomised prospective open-label trial. Women were randomised to either cyclical MP (Utrogestan® 200mg) or MPA (Provera® 10mg) in conjunction with t-E2 (Evorel® Patches 50mcg/day) for 12 months. Seventy-one subjects were screened, and baseline data are available for 57 subjects. Main outcome measure: Carotid-femoral pulse wave velocity (cfPWV). Results: PWV did not significantly change from baseline in either treatment arm. MP + t-E2 demonstrated a positive effect on traditional CVD markers, with a significant improvement seen in cardiac output (CO) ( $0.71 \pm 1.01 \text{ mL/min}$ , 95% CI 0.20 to 1.21) and reduction in diastolic blood pressure (DBP) ( $-3.43 \pm 6.31 \text{ mmHg}$ , 95% CI -6.57 to -0.29) and total peripheral resistance (TPR) ( $-0.15 \pm 0.19 \text{ mmHg-min-mL}^{-1}$ , 95% CI -0.24 to -0.05) after 12 months. MPA + t-E2, in contrast, did not demonstrate significant changes from baseline in traditional haemodynamic parameters. Conclusion: The positive changes in traditional markers were not reflected in the cardiogenic biomarker, cfPWV, which has demonstrated a high positive predictive value for cardiovascular events than traditional measurements.

**Maturitas. 2022 Jul;161:1-6. doi: 10.1016/j.maturitas.2022.01.016. Epub 2022 Jan 29.**

### **Menopausal symptom management in women with cardiovascular disease or vascular risk factors**

Heather Hirsch 1, JoAnn E Manson 2

Women with preexisting cardiovascular disease (CVD) or vascular risk factors commonly experience bothersome symptoms of menopause, including vasomotor symptoms (VMS) and genitourinary syndrome of menopause (GSM). Due to confusion surrounding the safety of menopausal hormone therapy (HT) in symptomatic women with CVD, evidence-based guidelines should be followed regarding identifying candidates for treatment and HT decision making. This review summarizes best practices in the evaluation and treatment of VMS and GSM in women with preexisting CVD, based on international expert consensus guidelines and/or expert opinion when data are scarce. For women with preexisting CVD or vascular risk factors who are candidates for HT, guidelines often address the appropriate formulation, dose, and route of delivery. For women who are not candidates for HT, non-hormonal options are reviewed, and their safety and efficacy in treating VMS and GSM are discussed. Due to increased knowledge of the role that pregnancy-related complications play in maternal risk for future CVD, these conditions are considered when addressing the use of systemic HT. Women at increased risk for future CVD without the use of HT, such as women with premature or early menopause, are also discussed, as well as the safety profile of HT in these special populations. With worldwide rates of CVD increasing among women in midlife, it is important for clinicians to have clear guidelines for identifying candidates for hormonal and nonhormonal treatments for symptom management to safeguard the health and quality of life of these patients through the menopause transition and post-menopause.

**Bone. 2022 Jun 7;116467. doi: 10.1016/j.bone.2022.116467. Online ahead of print.**

## **Creatine supplementation for older adults: Focus on sarcopenia, osteoporosis, frailty and Cachexia**

Darren G Candow, Philip D Chilibeck, Scott C Forbes, Ciaran M Fairman, Bruno Gualano, Hamilton Roschel.

Sarcopenia refers to the age-related reduction in strength, muscle mass and functionality which increases the risk for falls, injuries and fractures. Sarcopenia is associated with other age-related conditions such as osteoporosis, frailty and cachexia. Identifying treatments to overcome sarcopenia and associated conditions is important from a global health perspective. There is evidence that creatine monohydrate supplementation, primarily when combined with resistance training, has favorable effects on indices of aging muscle and bone. These musculoskeletal benefits provide some rationale for creatine being a potential intervention for treating frailty and cachexia. The purposes of this narrative review are to update the collective body of research pertaining to the effects of creatine supplementation on indices of aging muscle and bone (including bone turnover markers) and present possible justification and rationale for its utilization in the treatment of frailty and cachexia in older adults.

**Osteoporos Int. 2022 Jun 10. doi: 10.1007/s00198-022-06454-3. Online ahead of print.**

## **Global, regional prevalence, and risk factors of osteoporosis according to the World Health Organization diagnostic criteria: a systematic review and meta-analysis**

P-L Xiao # 1, A-Y Cui # 2, C-J Hsu # 1, R Peng 1, N Jiang 1, X-H Xu 1, Y-G Ma 1, D Liu 1, H-D Lu 3

This systematic review and meta-analysis estimated the global, regional prevalence, and risk factors of osteoporosis. Prevalence varied greatly according to countries (from 4.1% in Netherlands to 52.0% in Turkey) and continents (from 8.0% in Oceania to 26.9% in Africa). Osteoporosis is a common metabolic bone disorder in the elderly, usually resulting in bone pain and an increased risk of fragility fracture, but few summarized studies have guided global strategies for the disease. Therefore, we pooled the epidemiologic data to estimate the global, regional prevalence, and potential risk factors of osteoporosis. We conducted a comprehensive literature search through PubMed, EMBASE, Web of Science, and Scopus, to identify population-based studies that reported the prevalence of osteoporosis based on the World Health Organization (WHO) criteria. Meta-regression and subgroup analyses were used to explore the sources of heterogeneity. The study was registered in the PROSPERO database (CRD42021285555). Of the 57,933 citations evaluated, 108 individual studies containing 343,704 subjects were included. The global prevalence of osteoporosis and osteopenia was 19.7% (95%CI, 18.0%-21.4%) and 40.4% (95%CI, 36.9%-43.8%). Prevalence varied greatly according to countries (from 4.1% in Netherlands to 52.0% in Turkey) and continents (from Oceania 8.0% to 26.9% in Africa). The prevalence was higher in developing countries (22.1%, 95%CI, 20.1%-24.1%) than in developed countries (14.5%, 95%CI, 11.5%-17.7%). Our study indicates a considerable prevalence of osteoporosis among the general population based on WHO criteria, and the prevalence varies substantially between countries and regions. Future studies with robust evidence are required to explore risk factors to provide effective preventive strategies for the disease.

**Minerva Obstet Gynecol. 2022 Jun 8. doi: 10.23736/S2724-606X.22.05085-0. Online ahead of print.**

## **Fibromyalgia and menopause: an open study on postmenopausal hormone therapy**

Rejane C Dias 1, Eloise H Costa 2, Kadija R Chrisostomo 3, Jaime K Junior 4, Eduardo S Paiva 3, et al.

Background: Fibromyalgia women (FM) seems to get worse at menopause suggesting some influence of estrogens on its pathophysiology. We aimed to study the influence of postmenopausal hormone therapy (HT) in FM, the relationship with sleep and FM impact. Methods: We analyzed prospectively 69 menopausal women, divided in two groups, FM group (FMG; n=32) and comparison group (CG; n=28) submitted to HT for twelve weeks (1,2mg/g transdermal estradiol, 100 mg micronized natural progesterone oral/daily). Data on UQOL (Utian Quality of Life Questionnaire) and PSQI (Pittsburgh Sleep Quality Index) were obtained in both groups, at entrance and twelve weeks after HT. FM patients also completed the FIQ-R (Fibromyalgia Impact Questionnaire - revised) and FS (Fibromyalgia Severity). Results: FM patients improved significantly the FIQ-R (p=0.0001, median FIQ-R score 30% lower), mainly the severity of FM, assessed by FS (p<0.0001). Both groups had improved quality of life and sleep (UQOL: p=0.0001; p=0.001 - PSQI: p<0.0001; p=0.007, respectively). Differences between first and second PSQI

were greater for CG than for FMG ( $p=0.008$ ). Conclusions: HT improving sleep and quality of life in both groups; it was a significant clinical improvement seen by FIQ and FS in FM patients. These changes characterize improvement of functional status and symptoms severity.

**J Womens Health (Larchmt). 2022 Jun 8. doi: 10.1089/jwh.2021.0248. Online ahead of print.**

### **Oxidative Stress and Menopausal Status: The Coronary Artery Risk Development in Young Adults Cohort Study**

Amir S Heravi 1, Erin D Michos 2, Di Zhao 3, Bharath Ambale-Venkatesh 2, Henrique Doria De Vasconcellos, et al. and greater cardiovascular disease (CVD) risk. However, differences in oxidative stress between similarly aged premenopausal and postmenopausal women are not well-characterized on a population level. We hypothesized that urinary isoprostane concentrations, a standard measure of systemic oxidative stress, are higher in women who have undergone menopause compared to premenopausal women. Methods and Results: We examined differences in urinary 8-isoprostane (iPF2 $\alpha$ -III) and 2,3-dinor-8-isoprostane (iPF2 $\alpha$ -III-M) indexed to urinary creatinine between 279 postmenopausal and 196 premenopausal women in the Coronary Artery Risk Development in Young Adults (CARDIA) study, using linear regression with progressive adjustment for sociodemographic factors and traditional CVD risk factors. Unadjusted iPF2 $\alpha$ -III-M concentrations were higher among postmenopausal compared to premenopausal women (Median [25th, 75th percentile]: 1762 [1178, 2974] vs. 1535 [1067, 2462] ng/g creatinine;  $p = 0.01$ ). Menopause was associated with 25.5% higher iPF2 $\alpha$ -III-M (95% confidence interval [6.5-47.9]) adjusted for age, race, college education, and field center. Further adjustments for tobacco use (21.2% [2.9-42.6]) and then CVD risk factors (18.8% [0.1-39.6]) led to additional partial attenuation. Menopause was associated with higher iPF2 $\alpha$ -III in Black but not White women. Conclusions: We conclude that postmenopausal women had higher oxidative stress, which may contribute to greater CVD risk.

**Obstet Gynecol. 2022 Jun 1;139(6):1103-1110. doi: 10.1097/AOG.0000000000004723. Epub 2022 May 3.**

### **Menopausal Hormone Therapy Formulation and Breast Cancer Risk**

Haim A Abenhaim 1, Samy Suissa, Laurent Azoulay, Andrea R Spence, Nicholas Czuzoj-Shulman, Togas Tulandi  
Objective: To evaluate whether the increased risk of breast cancer is dependent on the formulation of menopausal hormone therapy (HT) used. Methods: We performed a population-based case-control study of women aged 50 years or older using data from the U.K. Clinical Practice Research Datalink. Women with incident cases of breast cancer were age-matched (1:10) with a control group of women with comparable follow-up time with no history of breast cancer. Exposures were classified as ever or never for the following menopausal HT formulations: bioidentical estrogens, animal-derived estrogens, micronized progesterone, and synthetic progestin. Logistic regression analyses were performed to estimate the adjusted effect of menopausal HT formulation on breast cancer risk. Results: Between 1995 and 2014, 43,183 cases of breast cancer were identified and matched to 431,830 women in a control group. In adjusted analyses, compared with women who never used menopausal HT, its use was associated with an increased risk of breast cancer (odds ratio [OR] 1.12, 95% CI 1.09-1.15). Compared with never users, estrogens were not associated with breast cancer (bioidentical estrogens: OR 1.04, 95% CI 1.00-1.09; animal-derived estrogens: OR 1.01, 95% CI 0.96-1.06; both: OR 0.96, 95% CI 0.89-1.03). Progestogens appeared to be differentially associated with breast cancer (micronized progesterone: OR 0.99, 95% CI 0.55-1.79; synthetic progestin: OR 1.28, 95% CI 1.22-1.35; both OR 1.31, 0.30-5.73). Conclusion: Although menopausal HT use appears to be associated with an overall increased risk of breast cancer, this risk appears predominantly mediated through formulations containing synthetic progestins. When prescribing menopausal HT, micronized progesterone may be the safer progestogen to be used.

**Menopause. 2022 Jun 1;29(6):664-670. doi: 10.1097/GME.0000000000001960.**

### **Clinical suspicion of sarcopenic obesity and probable sarcopenic obesity in Colombian women with a history of surgical menopause: a cross-sectional study**

Álvaro Monterrosa-Castro 1, María Prada-Tobar, Angélica Monterrosa-Blanco, Diana Pérez-Romero, et al.  
Objectives: To identify the frequency of clinical suspicion of sarcopenic obesity (CSSO) and probable sarcopenic obesity (PSO) and to estimate the association between them and surgical menopause. Methods: A cross-sectional study carried out in women residing in Colombia, ages 60 to 75 years. Body mass index, the SARC-F scale, SARC-

CalF < 31, and SARC-CalF <33 versions adding the calf circumference measurement in the last two were used to identify CSSO. Muscle strength measurement was added to the above measures to establish PSO. Surgical menopause was defined in women who underwent bilateral oophorectomy simultaneously with hysterectomy before natural menopause. Adjusted and unadjusted logistic regression were performed between CSSO or PSO with surgical menopause, bilateral oophorectomy after natural menopause, and abdominal hysterectomy with ovarian preservation. All participants provided informed consent.  $P < 0.05$  was statistically significant. Results: Seven hundred women  $67.0 \pm 4.8$  years old were included; 23.7% were obese, 68.1% had reduced muscle strength, and 4.2% had surgical menopause. CSSO was found in 3.0% with SARC-F and with SARC-CalF < 31; whereas 2.0% were found with SARC-CalF <33. PSO was found in 2.4%, 1.5%, and 2.2% with SARC-F, SARC-CalF <31, and SARC-CalF <33, respectively. Surgical menopause was associated with PSO but was not associated with CSSO. Bilateral oophorectomy after menopause and hysterectomy with ovarian preservation were not associated with CSSO or PSO. Conclusions: In a group of older adult women, the frequency of CSSO was up to 3.0% and PSO up to 2.4%. Surgical menopause was statistically significantly associated with PSO. On the contrary, CSSO was not associated.

**Menopause. 2022 Jun 1;29(6):654-663. doi: 10.1097/GME.0000000000001973.**

### **Female orgasmic dysfunction and severe climacteric symptomatology in women aged 40 to 59 years: an independent association from an analysis of a multicenter Latin American study**

Diego Urrunaga-Pastor 1, Edward Mezones-Holguin 2 3, Juan E Blümel 3 4, Moises Apolaya-Segura 5, German Barón 3, Emma Belzares 3, Ascanio Bencosme 3, Andres Calle 3, Maria T Espinoza 3, Daniel Flores 3, Humberto Izaguirre 3, Patricia León-León 3, Selva Lima 3, Alvaro Monterrosa 3, Desiree Mostajo 3, Daysi Navarro 3, Eliana Ojeda 3, Edwin Soto 3, Maria S Vallejo 3, Konstantinos Tserotas 3, Peter Chedraui 3 6 7

Objective: To evaluate the association between the severity of climacteric symptoms (CS) and orgasmic dysfunction (OD), controlled by demographic, clinical, and partner variables. Methods: We carried out a secondary analysis of a multicenter Latin American cross-sectional study that surveyed sexually active women 40 to 59 years old. We assessed CS (global, somatic, psychological, or urogenital domains) and OD. Also, we explored clinical variables and partner sexual conditions. We performed logistic regression models with nonparametric bootstrap resampling to estimate crude and adjusted odds ratios (aOR) with 95% confidence intervals (CI). Results: We included data of 5,391 women in the analysis. Regarding CS, 24.8%, 10.8%, 28.4%, and 32.9% had respectively severe symptoms according to total, somatic, psychological, and urogenital domain scores of the Menopause Rating Scale. OD was found in 25.4% of women. The adjusted model (including menopausal status and partner sexual dysfunction) showed that severe CS increased the odds of OD (aOR = 2.77; 95% CI: 2.41-3.19 [total Menopause Rating Scale score]; aOR = 1.65; 95% CI: 1.37-2.00 [somatic domain]; aOR = 2.02; 95% CI: 1.76-2.32 [psychological domain] and aOR = 3.89; 95% CI: 3.40-4.45 [urogenital]). Conclusions: Severe CS were associated with OD independently of demographic, clinical, and partner variables. Severe urogenital symptoms had the strongest association.