



Selección de Resúmenes de Menopausia

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Drugs Aging. 2022 Jul 30. doi: 10.1007/s40266-022-00962-x. Online ahead of print.

Hormonal Agents for the Treatment of Depression Associated with the Menopause

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Perimenopause marks the transition from a woman's reproductive stage to menopause. Usually occurring between 42 and 52 years of age, it is determined clinically by the onset of irregular menstrual cycles or variable cycle lengths. Women are at an increased risk of depression and anxiety during perimenopause and the menopausal transition. Depressive symptoms experienced in perimenopause are often more severe compared to pre- and post-menopause. During menopausal transition, the impact of fluctuating estrogen in the central nervous system (CNS) can have negative psychological effects for some women. Traditional first-line management of menopausal depression involves antidepressants, with modest outcomes. The positive effects of estrogen treatment in the CNS are becoming increasingly recognised, and hormonal therapy (HT) with estrogen may have a role in the treatment of menopausal depression. In this review we will outline the prevalence, impact and neurochemical basis of menopausal-associated depression, as well as hormone-based approaches that have increasing promise as effective treatments.

Sports Med. 2022 Jul 30. doi: 10.1007/s40279-022-01733-9. Online ahead of print.

Mechanisms of Estrogen Influence on Skeletal Muscle: Mass, Regeneration, and Mitochondrial Function

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Human menopause is widely associated with impaired skeletal muscle quality and significant metabolic dysfunction. These observations pose significant challenges to the quality of life and mobility of the aging population, and are of relevance when considering the significantly greater losses in muscle mass and force-generating capacity of muscle from post-menopausal females relative to age-matched males. In this regard, the influence of estrogen on skeletal muscle has become evident across human, animal, and cell-based studies. Beneficial effects of estrogen have become apparent in mitigation of muscle injury and enhanced post-damage repair via various mechanisms, including prophylactic effects on muscle satellite cell number and function, as well as membrane stability and potential antioxidant influences following injury, exercise, and/or mitochondrial stress. In addition to estrogen replacement in otherwise deficient states, exercise has been found to serve as a means of augmenting and/or mimicking the effects of estrogen on skeletal muscle function in recent literature. Detailed mechanisms behind the estrogenic effect on muscle mass, strength, as well as the injury response are beginning to be elucidated and point to estrogen-mediated molecular cross talk amongst signalling pathways, such as apoptotic signaling, contractile protein modifications, including myosin regulatory light chain phosphorylation, and the maintenance of muscle satellite cells. This review discusses current understandings and highlights new insights regarding the role of estrogen in skeletal muscle, with particular regard to muscle mass, mitochondrial function, the response to muscle damage, and the potential implications for human physiology and mobility.

Maturitas. 2022 Jul 21;165:38-46. doi: 10.1016/j.maturitas.2022.07.005. Online ahead of print.

Trajectories of metabolic parameters after bilateral oophorectomy in premenopausal women

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Objective: To study the trajectories of metabolic parameters after bilateral oophorectomy. Study design: This population-based cohort study included a random sample of all premenopausal women who underwent bilateral oophorectomy at or before age 45 years from 1988 to 2007 in Olmsted County, Minnesota, and their age-matched (± 1 year) referent women who did not undergo bilateral oophorectomy. Main outcome measures: The medical records of all women were reviewed to collect the metabolic parameters over a 10-year period. We compared three groups of women: 1) referent women (n = 270), 2) women who underwent bilateral oophorectomy and received estrogen therapy

(n = 163), and 3) women who underwent bilateral oophorectomy and did not receive estrogen therapy (n = 107). Results: Over 10 years of follow-up, the three groups had significantly different mean values of diastolic blood pressure, weight, body mass index (BMI), total cholesterol, triglycerides, and high-density lipoprotein cholesterol (HDL-C). However, women with and without bilateral oophorectomy were already different at baseline for hyperlipidemia, systolic blood pressure, weight, and BMI. Nevertheless, the trajectories of change over 10 years were significant for weight (group by time interaction $p = 0.03$), BMI ($p = 0.03$), and HDL-C ($p = 0.004$). The changes occurred primarily in the initial 4-5 years. Women who received estrogen therapy after bilateral oophorectomy were comparable to the referent women with respect to the weight and BMI trends, and they experienced an increase in HDL-C over time. Conclusion: Women who underwent bilateral oophorectomy before menopause experienced unfavorable changes in some metabolic parameters possibly increasing their cardiovascular risk.

Maturitas. 2022 Jul 22;165:33-37. doi: 10.1016/j.maturitas.2022.07.006. Online ahead of print.

Factors affecting climacteric women with SARS-CoV-2 infection: A multinational Latin America study (REDLINC XI)

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Objective: To evaluate the association between factors, especially those linked to the climacteric, and a history of COVID-19 infection. Methods: This was an observational, cross-sectional, and analytical study in which women from ten Latin American countries, aged 40-64, who attended a routine health check-up were invited to participate. A positive history for COVID-19 was based on reverse transcription-polymerase chain reaction reports. We evaluated sociodemographic, clinical, lifestyle, anthropometric variables, and menopausal symptoms using the Menopause Rating Scale (MRS). Results: A total of 1238 women were included for analysis, of whom 304 (24.6 %) had a positive history for COVID-19. The median [interquartile range: IQR] age of participants was 53 [IQR 12] years, duration of formal education was 16 [6] years, body mass index 25.6 [5.1] kg/m², and total MRS score 10 [13]. In a logistic regression model, factors positively associated with COVID-19 included postmenopausal status and having a family history of dementia (OR: 1.53; 95 % CI: 1.13-2.07, and 2.40; 1.65-3.48, respectively), whereas negatively associated were use of menopausal hormone therapy (current or past), being a housewife, and being nulliparous (OR: 0.47; 95 % CI: 0.30-0.73; 0.72; 0.53-0.97 and 0.56; 0.34-0.92, respectively). Smoking, being sexually active, and use of hypnotics were also factors positively associated with COVID-19. Conclusion: Postmenopausal status and a family history of dementia were more frequent among women who had had COVID-19, and the infection was less frequent among current or past menopause hormone therapy users and in those with less physical contact.

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Effects of exercise on vasomotor symptoms in menopausal women: a systematic review and meta-analysis

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The frequency and severity of menopausal vasomotor symptoms negatively impact quality of life. This systematic review evaluates the potential of exercise to relieve the subjective frequency and severity of vasomotor symptoms. We searched four databases to identify randomized controlled trials (RCTs) that evaluated the effect of structured exercise (e.g. aerobic training) on the severity and/or frequency of vasomotor symptoms in menopausal women. Two reviewers independently screened records for eligibility, extracted data and assessed risks of bias and evidence certainty using the Cochrane tool and Grading of Recommendations Assessment, Development and Evaluation (GRADE). When suitable, data were pooled using random-effect meta-analyses. We appraised 21 RCTs involving 2884 participants. Compared to no-treatment control, exercise significantly improved severity of vasomotor symptoms (10 studies, standardized mean difference [SMD] = 0.25; 95% confidence interval [CI]: 0.04 to 0.47, $p = 0.02$, very low certainty of evidence); the effect size was attenuated when studies with a high risk of bias were excluded (SMD = 0.11, 95% CI: -0.03 to 0.26, $p = 0.13$). No significant changes in vasomotor frequency were found between exercise and control (SMD = 0.14, 95% CI: -0.03 to 0.31, $p = 0.12$, high certainty of evidence). In conclusion, exercise might improve vasomotor symptom severity. Future rigorous RCTs addressing the limitations of current review are warranted to explore the optimal exercise prescription principles to target the severity of vasomotor symptoms.

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Disruption of sleep continuity during the perimenopause: Associations with female reproductive hormone profiles

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Context: Nocturnal vasomotor symptoms (nVMS), depressive symptoms (DepSx), and female reproductive hormone changes contribute to perimenopause-associated disruption in sleep continuity. Hormonal changes underlie both nVMS and DepSx. However, their association with sleep continuity parameters resulting in perimenopause-associated sleep disruption remains unclear. Objective: To determine the association between female reproductive hormones and perimenopausal sleep discontinuity independent of nVMS and DepSx. Design and intervention: Daily sleep and VMS diaries, and weekly serum assays of female reproductive hormones were obtained for 8 consecutive weeks in participants with mild DepSx. Generalized estimating equations were used to examine associations of estradiol, progesterone, and follicle-stimulating hormone (FSH) with mean number of nightly awakenings, wakefulness after sleep-onset (WASO) and sleep-onset latency (SOL) adjusting for nVMS and DepSx. Settings: Academic medical center. Patients: Forty-five perimenopausal women with mild DepSx but no primary sleep disorder. Main outcome measure: Diary-measured sleep continuity parameters. Results: Sleep disruption was common (median 1.5 awakenings/night, WASO 24.3 and SOL 20.0 minutes). More awakenings were associated with estradiol levels in the postmenopausal range ($\beta=0.14$, 95%CI 0.04 to 0.24, $p=0.007$), and higher FSH levels (β [one-unit increase]=0.12, 95%CI 0.02 to 0.22, $p=0.02$), but not with progesterone (β [one-unit increase]=-0.02, 95%CI -0.06 to 0.01, $p=0.20$) in adjusted models. Female reproductive hormones were not associated with WASO or SOL. Conclusion: Associations of more awakenings with lower estradiol and higher FSH levels provide support for a perimenopause-associated sleep discontinuity condition that is linked with female reproductive hormone changes, independent of nVMS and DepSx.