

Selección de Resúmenes de Menopausia

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Early midlife ovarian removal is associated with lower posterior hippocampal function

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Introduction: Women with early bilateral salpingo-oophorectomy (BSO) have greater Alzheimer's disease (AD) risk than women with spontaneous menopause (SM), but the pathway toward this risk is understudied. Considering associative memory deficits may reflect early signs of AD, we studied how BSO affected brain activity underlying associative memory. Methods: Early midlife women with BSO (with and without 17 β -estradiol therapy [ET]) and age-matched controls (AMCs) with intact ovaries completed a face-name associative memory task during functional magnetic resonance imaging. Hippocampal activity along the anteroposterior axis during associative encoding and retrieval was compared among three groups (BSO [n = 28], BSO+ET [n = 35], AMCs [n = 40]). Results: Both BSO groups (with and without ET) showed lower posterior hippocampal activation during encoding compared to the AMC group. However, this difference in activation was not significantly correlated with associative memory task performance. Discussion: Early 17 β -estradiol loss may influence posterior hippocampal activity during associative encoding, possibly presaging late-life AD. Highlights: After ovarian removal, changes in hippocampal function may affect dementia risk. Midlife ovarian removal is associated with less activation in the posterior hippocampus. Estradiol therapy may ameliorate alterations in brain function during learning.

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Comparative analysis of oral iron therapy regimens in premenopausal women with iron deficiency anemia

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Iron deficiency anemia (IDA) is prevalent among women of reproductive age. Treatment aims to replenish iron stores and normalize hemoglobin levels, with oral iron therapy being the preferred route in most cases. This study aimed to compare the efficacy and side effects of three common oral treatment regimens in premenopausal women with IDA. An observational study was conducted on patients initiated on oral ferrous glycine sulfate therapy (100 mg elemental iron). Patients were divided into three groups based on treatment regimen: alternate-day (n = 40), daily single-dose (n = 41), and daily twice dose (n = 40). Hemoglobin, ferritin, and transferrin saturation levels were measured before and after one month of therapy. The primary outcome was to compare laboratory changes from baseline to post-treatment within and between groups. The secondary outcome was to compare the frequency of gastrointestinal side effects. The mean age was 41.2 \pm 8 years, with a mean hemoglobin level of 10.4 \pm 1.1 g/dl, and a mean ferritin level of 7 \pm 3.2 ng/mL at the time of diagnosis. After one month of therapy, hemoglobin, ferritin, and transferrin saturation levels significantly increased in all groups (p < 0.001 for all). However, the increase in hemoglobin and ferritin levels was significantly lower in the alternate-day group compared to the other groups (p < 0.001). Gastrointestinal side effects were more prevalent in the daily twice group (66.1%) compared to the alternate-day (16.7%) and daily single-dose (23.4%) groups (p < 0.001). Daily single-dose oral ferrous glycine sulfate therapy emerged as an effective and well-tolerated treatment regimen for premenopausal women with IDA.

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Barriers to prescription of hormonal contraception and hormone replacement therapy in gynecological cancer survivors: results of a survey and literature review

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Background: The incidence of gynecological cancers in premenopausal women is increasing, highlighting issues related to Hormonal Contraception (HC) and Hormone Replacement Therapy (HRT). However, the presence of hormonal receptors in many gynecological cancers complicates HC and HRT prescriptions. **Objective:** To identify barriers experienced by gynecologists in prescribing HC and HRT to gynecological cancer survivors, with a secondary objective of conducting a literature review on the safety of these prescriptions. **Methods:** A nationwide survey was conducted among Portuguese gynecologists, including questions about their prescribing practices for HC and HRT in gynecological cancer survivors. For the narrative review, the authors searched MEDLINE, Embase, Cochrane Central Register of Controlled Trials, and SCOPUS from January 2019 to April 2024. The included studies encompassed gynecological cancer survivors using HC or HRT, detailing tumor histologic type and clinical outcomes. **Results:** 185 gynecologists participated in the questionnaire: 151 general gynecologists (81.6%) and 34 oncology gynecologists (18.4%). Of these, 49.7% and 55.1% had prescribed HC and HRT, respectively. Cervical cancer had the highest prescription rate, followed by vulvar and vaginal cancer, with fewer prescriptions for ovarian/fallopian tube, endometrial, and uterine corpus (non-endometrial) cancers. Older age and specialization in gynecologic oncology significantly predicted HC and HRT prescriptions ($p < 0.05$). Uncertainty was the main reason for not prescribing HC/HRT. A narrative review confirmed the safety of prescribing for specific tumor subtypes. **Conclusion:** The survey findings highlight an occasionally unfounded apprehension regarding the use of HC and HRT among gynecological cancer survivors. This underscores the crucial need for enhanced education on these matters.

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Prevalence and impact of vasomotor symptoms due to menopause among women in Canada: A subgroup analysis from an international cross-sectional survey of Women with Vasomotor Symptoms Associated with Menopause (WARM Study)

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Objective: The aim of the study was to assess the prevalence of postmenopausal vasomotor symptoms (VMS) and the impact of VMS and related treatment patterns among perimenopausal and postmenopausal Canadian women. **Methods:** A subgroup analysis of data from a cross-sectional online survey of women aged 40-65 years conducted November 4, 2021, through January 17, 2022, evaluated the prevalence of moderate/severe VMS among postmenopausal Canadian women. The analysis also assessed survey responses from perimenopausal and postmenopausal Canadian women with moderate/severe VMS who completed the Menopause-Specific Quality of Life questionnaire, Work Productivity and Activity Impairment questionnaire, and the Patient-Reported Outcomes Measurement Information System Sleep Disturbances-Short Form 8b and answered questions about treatment patterns and attitudes toward treatments. **Results:** Of 2,456 Canadian postmenopausal women, 360 (14.7%; primary analysis) reported moderate/severe VMS in the previous month. Perimenopausal and postmenopausal women with moderate/severe VMS ($n = 400$; secondary analysis) reported negative impact on overall quality of life (mean total Menopause-Specific Quality of Life questionnaire score: 4.3/8). VMS impaired overall work and daily activities by 30.2% and 35.7%, respectively. Overall mean (SD) Patient-Reported Outcomes Measurement Information System Sleep Disturbance-Short Form 8b score (scale 8-40) was 28.5 (6.9), confirming sleep disturbances in this population. The majority of women (88% of the total cohort) sought advice, but about half were never treated. Most women had positive or neutral attitudes toward menopause. **Conclusions:** In a survey conducted in Canada, moderate/severe VMS were reported by 14.7% of postmenopausal women and were associated with impairment in quality of life, work productivity, daily activities, and sleep in perimenopausal and postmenopausal women.

Menopause. 2025 Jan 1;32(1):12-22. doi: 10.1097/GME.0000000000002481.

Associations of blood pressure with white matter hyperintensities later in life; influence of short-term menopausal hormone therapy

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Objective: To assess the association of systolic and diastolic blood pressure (SBP and DBP) in recently menopausal women with white matter hyperintensity (WMH) volume later in life and determine whether short-term menopausal hormone therapy (mHT) modifies these associations. **Methods:** Kronos Early Estrogen Prevention Study (KEEPS) was a multicenter, randomized, double-blinded, placebo-controlled 4-year mHT trial (oral conjugated equine estrogens or transdermal 17β -estradiol). KEEPS continuation was an observational follow-up of the participants 10 years after the end of mHT. The associations between KEEPS baseline blood pressure (BP) with KEEPS continuation WMH volume were examined adjusting for covariates in model 1 (age, total intracranial volume, study site, mHT type) and model 2

(additionally conventional CVD risk factors). Interaction terms (BP \times mHT type) were added into the linear regression models. Results: The mean \pm SD ages of participants were 53 (\pm 2) years at KEEPS baseline and 67 (\pm 2) years at KEEPS continuation. Elevated BP at KEEPS baseline was associated with greater WMH volume measured 14 years later (model 1: SBP: $\beta = 0.01$ [95% CI, 0.001-0.01] and DBP: $\beta = 0.01$ [95% CI, 0.003-0.03]) and after additionally adjusting for CVD risk factors (model 2). We did not find any evidence that mHT versus placebo modified these associations. Topographically, higher BP was associated with greater periventricular WMH in the frontal and parietal lobes. Conclusion: Our findings suggest the importance of maintaining normal BP in recently postmenopausal women with low CVD risk, irrespective of short-term mHT usage, to potentially reduce the risk of WMH later in life.

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Oral administration of ethinyl estradiol and the brain-selective estrogen prodrug DHED in a female common marmoset model of menopause: Effects on cognition, thermoregulation, and sleep

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Menopausal symptoms of sleep disturbances, cognitive deficits, and hot flashes are understudied, in part due to the lack of animal models in which they co-occur. Common marmosets (*Callithrix jacchus*) are valuable nonhuman primates for studying these symptoms, and we examined changes in cognition (reversal learning), sleep (48 h/wk of sleep recorded by telemetry), and thermoregulation (nose temperature in response to mild external warming) in middle-aged, surgically-induced menopausal marmosets studied at baseline, during 3-week phases of ethinyl estradiol (EE2, 4 μ g/kg/day, p.o.) treatment and after EE2 withdrawal. We also assessed a brain-selective hormonal therapy devoid of estrogenic effects in peripheral tissues on the same measures (cognition, sleep, thermoregulation) after treatment with the estrogen prodrug 10 β ,17 β -dihydroxyestra-1,4-dien-3-one (DHED, 100 μ g/kg/day, p.o) and DHED withdrawal. Reversal learning performance was improved with EE2 or DHED treatment relative to phases without hormone administration, as indicated by a faster reversal of the stimulus/reward contingencies. Both EE2 and DHED increased non-REM sleep and reduced nighttime awakenings relative to baseline, but to the detriment of REM sleep which was highest at baseline. Nasal temperature in response to mild external warming was highest, and overnight core body temperature lowest, in the DHED treatment phase compared to both the EE2 and baseline phases. These results suggest that low dose estradiol, delivered either peripherally or centrally via DHED, benefits selective aspects of cognition and sleep in a marmoset menopause model. DHED appears a promising therapeutic candidate for alleviating the cognitive and sleep disruptions associated with estrogen deficiency in primates.

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Association between the female hormone intake and cardiovascular disease in the women: a study based on NHANES 1999-2020

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Although many studies have reported the relationship between female hormone intake and cardiovascular disease (CVD) development, their association has not been fully elucidated and defined, based on data from the Third National Health and Nutrition Examination Survey intending to assess the health and nutritional status of non-institutionalized children and adults in the United States. This study examined the relationship between female hormone intake and coronary artery disease (CVD) development in 38,745 women, averaging 38.10 ± 12.59 years in age. We explored the association between hormone intake and CVD incidence, considering various social determinants of health (SDOH) with statistical methods like Chi-square tests, logistic regression, and stratified Chi-square analysis. Our findings reveal a complex relationship between female hormone intake and CVD development. Hormones appear to reduce CVD risk in women over 60 years old. However, hormone intake correlates with increased CVD risk in highly educated women. Socioeconomic status also influences this relationship; while hormones pose a risk factor for heart failure and stroke in impoverished or wealthy women, they serve as a protective factor against CVD for middle-income women. Additionally, hormonal intake seems beneficial for women who experienced menarche between 13 and 15 years old, menopause between 30 and 49, and had 7-9 pregnancies, especially when coupled with a diet low in sugar, fat, cholesterol, and adequate folic acid intake. These results indicate that while hormones can prevent CVD under specific conditions, their impact can be detrimental in different SDOH contexts. In conclusion, while appropriate hormone intake can prevent CVD, its effects vary across different demographic and health backgrounds. This underscores the necessity for meticulous screening of SDOH factors in clinical settings to maximize the protective benefits of hormones against CVD.