



## Selección de Resúmenes de Menopausia

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### Estrogen and alcohol use in women: a targeted literature review

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**Purpose:** Alcohol is posited to affect sex steroid hormone concentrations, and a growing body of research has demonstrated menstrual cycle effects on women's use of alcohol. The present targeted review synthesizes the literature examining the relationship between alcohol use and estradiol in women and suggests directions for future research. **Methods:** Articles were identified using the PubMed database using the following criteria: published in English, presented original findings for women, were peerreviewed, and included measures of estradiol levels in the analyses. Twenty-nine articles were identified for inclusion. **Results:** Results from this review indicate acute alcohol use temporarily increases estradiol levels in women, and this may be strongest when gonadotropins are high. Regular alcohol use ( $\geq 1$  drink per day) increases estradiol levels, but estradiol appears to be suppressed in women with alcohol use disorders and physiologic dependence. Alcohol use tends to be highest in women during ovulation, when estradiol is high, and progesterone is low. **Conclusion:** Alcohol use increases estradiol levels in women, particularly in the presence of gonadotropins. More research is needed to assess the effect of estradiol on alcohol use in women. Research on the relationship of estrogen and alcohol use in women is needed to elucidate health outcomes through the lifespan.

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### The effect of resistance training in reducing hot flushes in post-menopausal women: A meta-analysis

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**Objective:** The objective of this meta-analysis is to study the effect of different strengths of resistance training programs on the severity and frequency of hot flushes in postmenopausal women with vasomotor symptoms. **Background:** Menopause is defined as the state in which the menstrual cycle of a biological female spontaneously comes to a halt for a period of about 1 year. Through a detailed analysis of much of the research, it is found that the resistance training program is beneficial not only for reducing the severity as well as the frequency of hot flushes in postmenopausal women. **Materials and methods:** Online research was conducted through databases such as PubMed, Cochrane Trial Register, and Google Scholar till the 20th of March 2023. The Review Manager (version 5.4.1) was used to statistically analyze the data from the studies. Studies meeting the inclusion criteria, comparing the vasomotor symptoms in resistance training groups as compared to control were used for this meta-analysis. The primary outcome of interest was the alleviation of hot flushes in the resistance training group. Random-effect model was used to pool the studies and the result was reported in SMD with 95% Confidence Interval (CI). **Results:** 5 studies were selected for this review. Statistical analysis shows that vasomotor symptoms were more common in the control group and decreased significantly in the resistance training group after the intervention (SMD = -1.31, 95% CI: -1.85 to -0.77,  $p = 0.002$ ). **Conclusion:** Resistance Training significantly affects vasomotor symptoms and can be considered for such symptoms in postmenopausal women.

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### Type 2 Diabetes Mellitus Prevalence and Associated Risk Factors in Postmenopausal Women

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**Introduction** Type 2 diabetes mellitus (T2DM) is the most common problem in postmenopausal women. This study aimed to find out the prevalence of T2DM and its risk factors in postmenopausal women. **Methods** The study is a population-based cross-sectional study. Anthropometric measurements, blood pressure, and biochemical measurements of 2295 postmenopausal women up to the age of 55 years were taken following face-to-face interviews. Odds ratio was used to find out the role of risk factors associated with T2DM. **Results** Prevalence of T2DM was reported to be 15.51%. Significant contribution of waist circumference (WC) followed by body mass index (BMI),

total cholesterol (TC), and triglycerides ( $p < 0.05$ ) was noted in increasing the risk of T2DM. No association was found between T2DM and hypertension ( $p > 0.05$ ). Conclusion A high prevalence of T2DM was reported in postmenopausal women. Higher levels of BMI, WC, TC, and triglycerides were found to be the major risk factors for T2DM.

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### **Early menopause and hormone therapy as determinants for lung health outcomes: a secondary analysis using the PLCO trial**

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Rationale: Early natural menopause (early-M; <45 years of age) increases the risk of lung morbidities and mortalities in smokers. However, it is largely unknown whether early-M due to surgery demonstrates similar effects and whether menopausal hormone therapy (MHT) is protective against lung diseases. Objectives: To assess the associations of early-M and MHT with lung morbidities and mortalities using the prospective Prostate, Lung, Colorectal and Ovarian (PLCO) trial. Methods: We estimated the risk among 69 706 postmenopausal women in the PLCO trial, stratified by menopausal types and smoking status. Results: Early-M was associated with an increased risk of most lung disease and mortality outcomes in ever smokers with the highest risk seen for respiratory mortality (HR 1.98, 95% CI 1.34 to 2.92) in those with bilateral oophorectomy (BO). Early-M was positively associated with chronic bronchitis, and all-cause, non-cancer and respiratory mortality in never smokers with natural menopause or BO, with the highest risk seen for BO- respiratory mortality (HR 1.91, 95% CI 1.16 to 3.12). Ever MHT was associated with reduced all-cause, non-cancer and cardiovascular mortality across menopause types regardless of smoking status and was additionally associated with reduced risk of non-ovarian cancer, lung cancer (LC) and respiratory mortality in ever smokers. Among smokers, ever MHT use was associated with a reduction in HR for all-cause, non-cancer and cardiovascular mortality in a duration-dependent manner. Conclusions: Smokers with early-M should be targeted for smoking cessation and LC screening regardless of menopause types. MHT users had a lower likelihood of dying from LC and respiratory diseases in ever smokers.

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### **Management of menopause in women with a history of endometriosis**

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Due to increasing life expectancy, women spend a significant part of their lives in menopause. Women with a history of endometriosis are more likely to become menopausal at an early age due to bilateral oophorectomy or repeated ovarian surgery. In addition, some medical therapies used for endometriosis, such as gonadotropin releasing hormone agonists or progestins reduce bone mineral density. Furthermore, women with endometriosis have a higher background risk of cardiovascular disorders and hypercholesterolemia. Hence, it is important to recommend the use of hormone replacement therapy (HRT) to these women when they become menopausal, at least until the age of natural menopause. Although based on limited data, there is a possibility of reactivation of symptoms of endometriosis or its lesions, and a theoretical possibility of malignant transformation, although this remains unproven. Therefore, women should be advised in the light of this information before starting HRT after the age of natural menopause and are asked to seek help if they experience symptoms that may indicate these changes. Estrogen only HRT should be avoided and combined HRT preparations should be recommended, even after a hysterectomy.

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### **Endocrine consequences of breast cancer therapy and survivorship**

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Breast cancer survivorship is increasing, due to earlier diagnosis of the disease and more effective therapies. Long-term endocrine sequelae, including early menopause, bone health, fertility implications and menopausal symptoms, are important survivorship issues. Ovarian failure is common with chemotherapy and options for preserving fertility in young women include ovarian suppression during chemotherapy and oocyte or embryo cryopreservation before chemotherapy. Tamoxifen as adjunct therapy in premenopausal women leads to ovarian stimulation, sometimes ovulation and occasionally pregnancy with important teratogenic implications. Aromatase inhibitor therapy with or without gonadotrophin releasing hormone (GnRH) agonist leads to profound bone loss and anti-resorptive therapy is advised to prevent fracture. Tamoxifen acts to preserve bone in postmenopausal women but not premenopausal women.

Pregnancy is not discouraged in young women with early breast cancer, even to the point of pausing adjunct therapy in order to conceive. However, menopausal hormone therapy is discouraged even years later. Non-hormonal therapy for menopausal symptoms in breast cancer survivors is available but, in some cases, estrogen-containing therapy may be worthy of consideration for quality of life in the informed patient.

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## **Neuroprotective effect of hormone replacement therapy: a review of the literature**

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**Objective:** Menopause is a physiological period characterized by the cessation of ovarian activity. Sequential changes during this transition affect multiple systems, including the brain. Sixty percent of women experience cognitive impairment. The objective of this review is to show the neuroprotective effect of hormone replacement therapy (HRT) through the different scales and whether there is a benefit of this in women. **Method:** A search was conducted in six databases. Eligibility criteria included women within 10 years of menopause, receiving HRT controlled with placebo, studies lasting more than 6 months and women without a history of chronic underlying pathology. **Results:** A total of nine randomized controlled trials met the inclusion criteria. Regarding memory, two studies reported better performance of HRT with a significant odds ratio (OR) of 0.67; regarding attention, one study reported potential improvement in women receiving HRT with a significant OR of 0.87; and neuroimaging assessment found an increase in ventricular volume compared to placebo over a 3-year period. **Conclusions:** The early initiation of menopausal HRT in healthy women appears to yield a positive effect on certain cognitive aspects, such as attention and cortical volume in the central nervous system. These findings should be confirmed through future prospective studies.

**Actas Esp Psiquiatr. 2024 Jun;52(3):334-346. doi: 10.62641/aep.v52i3.1560.**

## **Osteoporosis and Fracture Risk Associated with Novel Antidepressants: A Systematic Review and Meta-Analysis**

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**Background:** The use of antidepressants, especially selective serotonin reuptake inhibitors (SSRIs), has been linked to adverse effects on bone health, but findings are conflicting. This study aimed to quantify the associations between newer antidepressants and bone mineral density (BMD) and fracture risk through a comprehensive meta-analysis. **Methods:** Observational studies on the association between the use of novel antidepressants and BMD and hip fracture were systematically searched in PubMed, Embase, CINAHL, Cochrane Library, and Scopus. Random effects meta-analyses were conducted to pool results across the eligible studies. The heterogeneity, publication bias, and influence were assessed extensively. **Results:** 14 eligible studies with 1,417,134 participants were identified. Antidepressant use was associated with significantly lower BMD compared to non-use at all skeletal sites examined, with pooled standardized mean differences (SMD) ranging from -0.02 (total hip) to -0.04 (femoral neck). Importantly, antidepressant use was associated with a 2.5-fold increased risk of hip fracture (pooled odds ratio (OR) 2.50, 95% CI 2.26-2.76). While heterogeneity was detected, the overall findings were robust in sensitivity analyses. **Conclusions:** This meta-analysis provided strong evidence that novel antidepressants, especially widely used SSRIs, have detrimental impacts on bone health. The observed associations with decreased BMD and doubled hip fracture risk have important clinical implications.

**Menopause. 2024 Jun 11. doi: 10.1097/GME.0000000000002376. Online ahead of print.**

## **Relationship between menopausal hormone therapy and colorectal cancer: a cohort study utilizing the health insurance database in South Korea (HISK)-II**

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**Objective:** Many studies have demonstrated that menopausal hormone therapy is associated with a reduced risk for colorectal cancer. This study investigated the relationship between specific hormone therapy regimens and colorectal cancer risk in postmenopausal women in South Korea using national insurance claims data. **Methods:** This population-based, retrospective cohort study used insurance data provided by the Health Insurance Review and Assessment Service between 2007 and 2020. The hormone therapy group comprised women  $\geq 40$  years of age who underwent hormone therapy for the first time between 2011 and 2014. The control group included women  $\geq 40$  years of age who

visited medical institutions for menopause-related issues during the same period but did not undergo hormone therapy. Results: After 1:1 propensity score matching, 153,736 women were grouped into either the hormone therapy or nonhormone therapy groups. The incidence of colorectal cancer was 46 and 53 per 100,000 person-years in the nonhormone therapy and hormone therapy groups, respectively. Hormone therapy was associated with an increased risk for colorectal cancer (hazard ratio 1.124 [95% confidence interval 1.002-1.261]). Subgroup analysis, according to hormone therapy type, revealed no significant differences in the risk of colorectal cancer for estrogen plus progestogen or estrogen therapy alone; however, tibolone was associated with an increased risk of colorectal cancer compared to nonhormone therapy (hazard ratio, 1.178 [95% confidence interval, 1.021-1.359]). Conclusions: This study found an increased risk of colorectal cancer in women receiving hormone therapy, and tibolone was significantly associated with an increased risk of colorectal cancer. However, the magnitude of the increase was small and unlikely to be of clinical significance.