



Selección de Resúmenes de Menopausia

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Relationship between vitamin D levels and age of menopause and reproductive lifespan: Analysis based on the National health and nutrition examination survey (NHANES) 2001-2018

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Objectives: To determine the association between serum vitamin D levels and age at menopause and reproductive lifespan in a group of US postmenopausal women. **Study design:** Data from 6,326 postmenopausal US women in the National Health and Nutrition Examination Survey (NHANES) database 2001-2018 were obtained. Weighted multinomial logistic regression models were used to obtain odds ratios (OR) and 95% confidence intervals (CI). **Statistical analyzes** were performed using SAS (version 9.4; SAS Institute), and complex survey designs were considered. **Results:** Vitamin D deficiency was associated with a higher likelihood of early menopause (OR = 1.34, 95% CI: 1.15, 1.58; $p = 0.008$) and lower odds of late menopause (OR = 0.79, 95% CI: 0.52, 0.95) in the unadjusted model but not in the adjusted model. Lower vitamin D levels were associated with a higher risk of a shorter reproductive lifespan. The strongest association was seen in the first tertile of vitamin D deficiency (OR = 1.54; 95% CI: 1.29-1.83). After adjustment, the associations were somewhat weakened but remained statistically significant. **Conclusions:** The results of this study suggest that vitamin D deficiency and inadequacy might be associated with earlier age at menopause. It may also reduce the reproductive lifespan in women. Given the cross-sectional nature of the NHANES dataset, these results should be interpreted with caution due to temporality bias. Menopausal age is a multifactorial phenomenon, and the identification of factors and their interactions should be evaluated in future studies.

J Am Heart Assoc. 2023 Sep 8;e030280. doi: 10.1161/JAHA.123.030280. Online ahead of print.

Age at Menopause and the Risk of Stroke: Observational and Mendelian Randomization Analysis in 204 244 Postmenopausal Women

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Background Observational studies have shown that women with an early menopause are at higher risk of stroke compared with women with a later menopause. However, associations with stroke subtypes are inconsistent, and the causality is unclear. **Methods and Results** We analyzed data of the UK Biobank and EPIC-CVD (European Prospective Investigation Into Cancer and Nutrition-Cardiovascular Diseases) study. A total of 204 244 postmenopausal women without a history of stroke at baseline were included (7883 from EPIC-CVD [5292 from the subcohort], 196 361 from the UK Biobank). Pooled mean baseline age was 58.9 years (SD, 5.8), and pooled mean age at menopause was 47.8 years (SD, 6.2). Over a median follow-up of 12.6 years (interquartile range, 11.8-13.3), 6770 women experienced a stroke (5155 ischemic strokes, 1615 hemorrhagic strokes, 976 intracerebral hemorrhages, and 639 subarachnoid hemorrhages). In multivariable adjusted observational Cox regression analyses, the pooled hazard ratios per 5 years younger age at menopause were 1.09 (95% CI, 1.07-1.12) for stroke, 1.09 (95% CI, 1.06-1.13) for ischemic stroke, 1.10 (95% CI, 1.04-1.16) for hemorrhagic stroke, 1.14 (95% CI, 1.08-1.20) for intracerebral hemorrhage, and 1.00 (95% CI, 0.84-1.20) for subarachnoid hemorrhage. When using 2-sample Mendelian randomization analysis, we found no statistically significant association between genetically proxied age at menopause and risk of any type of stroke. **Conclusions** In our study, earlier age at menopause was related to a higher risk of stroke. We found no statistically significant association between genetically proxied age at menopause and risk of stroke, suggesting no causal relationship.

Cureus. 2023 Aug 6;15(8):e43053. doi: 10.7759/cureus.43053. eCollection 2023 Aug.

The Role of Estrogen Therapy as a Protective Factor for Alzheimer's Disease and Dementia in Postmenopausal Women: A Comprehensive Review of the Literature

Noor Ali 1 2, Rohab Sohail 3, Syeda Rabab Jaffer 4, Sadia Siddique 5, Berfin Kaya 6 7, Inioluwa Atowoju 8, et al. The complete cessation of menstruation for 12 months with associated vasomotor symptoms is termed menopause. Apart from playing a role in reproduction, estrogen significantly affects the central nervous system (CNS). Population-based studies highlighted a substantial difference in the prevalence of dementia between men and women, with Alzheimer-associated dementia being more prevalent in women, indicating that estrogen deficiency might be a risk factor for neurodegenerative diseases. Patients with dementia experience a progressive decline in neurocognitive function, beginning with short-term memory loss that progresses to long-term memory loss and the inability to perform everyday activities, leading ultimately to death. There is currently no cure for dementia, so preventing or slowing the disease's progression is paramount. Accordingly, researchers have widely studied the role of estrogen as a neuroprotective agent. Estrogen prevents dementia by augmenting Hippocampal and prefrontal cortex function, reducing neuroinflammation, preventing degradation of estrogen receptors, decreasing oxidative damage to the brain, and increasing cholinergic and serotonergic function. According to the window phase hypothesis, estrogen's effect on preventing dementia is more pronounced if therapy is started early, during the first five years of menopause. Other studies like The Woman's Health Initiative Memory Study (WHIMS) showed unfavorable effects of estrogen on the brain. This review aims to establish an understanding of the currently available data on estrogen's effect on neurodegeneration, namely, dementia and Alzheimer's disease.

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What is the evidence for the effect of physical exercise on bone health in menopausal women? An umbrella systematic review

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This study aimed to analyze the effects of physical exercise (PE) on bone health in menopausal women through an umbrella review and to assess the quality of systematic reviews (SRs) and meta-analyses (MAs) included. The review was registered in PROSPERO (CRD42020208130) and the Rayyan application was used. The methodological quality of the included studies was evaluated by A MeaSurement Tool to Assess Systematic Reviews (AMSTAR), and Grading of Recommendations Assessment, Development and Evaluation (GRADE) was applied to assess the level of evidence of the results. The results showed that low-intensity jumping exercises with longer sessions proved to be efficient in the hip segment. Swimming requires further investigation, as it showed high heterogeneity. Aerobic and resistance exercises showed inconsistent results, requiring further studies with these modalities of PE. Concurrent training showed improvements in the lumbar spine, femoral neck, Ward's triangle and trochanter. Finally, combined resistance exercises are effective in preserving bone mineral density (BMD) of the femoral neck and lumbar spine in postmenopausal women. In conclusion, jumping exercises were efficient in the hip, while aerobic and resistance exercises are still inconsistent. Concurrent training showed improvements in BMD of the lumbar spine, femoral neck, Ward's triangle and trochanter. Finally, combined resistance protocols are effective in preserving BMD of the femoral neck and lumbar spine in postmenopausal women.

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Prevalence of metabolic syndrome and its components in Chinese women with premature ovarian insufficiency

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Objectives: To assess the prevalence of metabolic syndrome (MetS) and its components in Chinese women with premature ovarian insufficiency (POI) and to explore the metabolic profile of Chinese women with POI. Methods: 118 POI women aged 20-38 years and 151 age-and-BMI-matched control women were recruited. Measurements included body height, weight, waist circumference (WC), hip circumference (HC), blood pressure, follicle-stimulating hormone (FSH), luteinizing hormone (LH), estradiol (E2), triglycerides (TG), total cholesterol (TC), high-density lipoprotein cholesterol (HDL-C), low-density lipoprotein cholesterol (LDL-C), fasting plasma glucose (FPG) and fasting insulin (FINS). Prevalence and components of MetS and metabolic indices were compared between the two groups. Results: The prevalence of MetS in POI women and age-and-BMI-matched control women was 16.9% and 11.3%, respectively, which was not significantly different ($p > .05$). The prevalence of hypertriglyceridemia and high fasting glucose was significantly higher in POI than control (17.8% vs. 9.3%, $p = .039$; 16.9% vs. 6.6%, $p = .008$), without significant differences in the prevalence of other components of MetS ($p > .05$). The levels of TG, FINS, and HOMA-IR in POI were significantly higher than in control ($p < .05$) but without significant differences in WC, WHR, SBP, DBP, TC,

HDL-C, LDL-C, and FPG ($p > .05$). HOMA-IR was positively correlated with WC, DBP, TG, and FPG and negatively correlated with HDL-C in both POI women and control ($p < .05$). Conclusions: POI women presented with more unfavorable cardiovascular risk factors (higher prevalence of hypertriglyceridemia and high fasting glucose; higher TG, FINS, and HOMA-IR). So, women diagnosed with POI should always be covered with special care of metabolic profile.

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Salpingectomy for the Primary Prevention of Ovarian Cancer: A Systematic Review

Ryan M Kahn 1, Sushmita Gordhandas 1, Kendra Godwin, Rebecca L Stone, Michael J Worley Jr, Karen H Lu, et al
Importance: Most ovarian cancers originate in the fimbriated end of the fallopian tube. This has led to the hypothesis that surgical resection of the fallopian tubes at the time of gynecologic and nongynecologic surgical procedures—referred to as an opportunistic salpingectomy—may prevent the development of epithelial ovarian cancer for women at an average risk of developing the disease. **Objective:** To compile a comprehensive, state-of-the-science review examining the current landscape of performing bilateral salpingectomy for ovarian cancer prevention. **Evidence review:** A systematic review of the literature was performed on March 4, 2022, to identify studies examining salpingectomy for ovarian cancer prevention. **Findings:** The initial search produced 1089 results; a total of 158 publications were included in the final review. Salpingectomy has been associated with ovarian cancer risk reduction of approximately 80%. Studies have demonstrated that salpingectomy was safe, cost-effective, and was not associated with an earlier age of menopause onset. With widespread implementation, salpingectomy has the potential to reduce ovarian cancer mortality in the US by an estimated 15%. Both physician and patient awareness regarding the adnexa as the origin for most ovarian cancers, as well as the existence of salpingectomy and its potential benefits in reducing ovarian cancer risk, has increased during the past decade. Raising awareness and developing effective implementation strategies are essential. **Conclusions and relevance:** The results of this systematic review suggest that bilateral salpingectomy for ovarian cancer prevention was safe and feasible and has the potential to be a cost-effective and cost-saving strategy across the population. Prospective studies to demonstrate long-term survival outcomes and feasibility in nongynecologic surgical procedures are warranted.

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Diagnosis and management of prolactin-secreting pituitary adenomas: a Pituitary Society international Consensus Statement

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 This Consensus Statement from an international, multidisciplinary workshop sponsored by the Pituitary Society offers evidence-based graded consensus recommendations and key summary points for clinical practice on the diagnosis and management of prolactinomas. Epidemiology and pathogenesis, clinical presentation of disordered pituitary hormone secretion, assessment of hyperprolactinaemia and biochemical evaluation, optimal use of imaging strategies and disease-related complications are addressed. In-depth discussions present the latest evidence on treatment of prolactinoma, including efficacy, adverse effects and options for withdrawal of dopamine agonist therapy, as well as indications for surgery, preoperative medical therapy and radiation therapy. Management of prolactinoma in special situations is discussed, including cystic lesions, mixed growth hormone-secreting and prolactin-secreting adenomas and giant and aggressive prolactinomas. Furthermore, considerations for pregnancy and fertility are outlined, as well as management of prolactinomas in children and adolescents, patients with an underlying psychiatric disorder, postmenopausal women, transgender individuals and patients with chronic kidney disease. The workshop concluded that, although treatment resistance is rare, there is a need for additional therapeutic options to address clinical challenges in treating these patients and a need to facilitate international registries to enable risk stratification and optimization of therapeutic strategies.