

Selección de Resúmenes de Menopausia

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Resistance training decreased abdominal adiposity in postmenopausal women

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Objective: To investigate if abdominal adipose tissue volumes and ratios change after a 15-week structured resistance training intervention in postmenopausal women with vasomotor symptoms (VMS). Study design: Sixty-five postmenopausal women with VMS and low physical activity were randomized to either three days/week supervised resistance training or unchanged physical activity for 15 weeks. Women underwent clinical anthropometric measurements and magnetic resonance imaging (MRI) at baseline and after 15 weeks. MRI was done using a Philips Ingenia 3.0 T MR scanner (Philips, Best, The Netherlands). The per protocol principle was used in the analysis of data. Main outcome measurements: The absolute change from baseline to week 15 in visceral adipose tissue (VAT) volume and the relative ratio (VAT ratio) between VAT and total abdominal adipose tissue (TAAT), i.e. the sum of abdominal subcutaneous adipose tissue (ASAT) and VAT. Results: There were no significant differences between the groups in characteristics, anthropometry or MRI measures at baseline. Women who were compliant with the intervention (i.e. participated in at least two of the three scheduled training sessions per week) had significantly different reduction over time in ASAT ($p = 0.006$), VAT ($p = 0.002$), TAAT ($p = 0.003$) and fat ratio ($p < 0.001$) compared with women in the control group. Conclusions: Implementation of a 15-week resistance training regimen in midlife may help women to counteract the abdominal fat redistribution associated with the menopausal transition.

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Effect of resistance training on lipid profile in postmenopausal women: A systematic review and meta-analysis of randomized controlled trials

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Objective: Physical exercise decreases cardiovascular risk and can alter the lipid profile in postmenopausal women. Although it is believed that resistance training can potentially decrease serum lipid levels in postmenopausal females, the evidence remains inconclusive. The aim of this systematic review and meta-analysis of randomized controlled trials (RCTs) was to clarify the impact of resistance training on the lipid profile in postmenopausal women. Methods: Web of Science, Scopus, PubMed/Medline and Embase were searched. RCTs that evaluated the effect of resistance training on total cholesterol (TC), high-density lipoprotein cholesterol (HDL-C), low-density lipoprotein cholesterol (LDL-C) and triglyceride (TG) levels were included in this review. Effect size was estimated using the random effects model. Subgroup analyses based on age, duration of intervention, pre-enrolment serum lipid levels and body mass index were performed. Results: Data pooled from 19 RCTs revealed that resistance training can reduce TC [weighted mean difference (WMD) -11.47 mg/dl; $p = 0.002$], LDL-C (WMD -8.48 mg/dl; $p = 0.01$) and TG (WMD -6.61 mg/dl; $p = 0.043$) levels. TC levels decreased particularly in subjects aged < 60 years (WMD -10.77 mg/dl; $p = 0.003$), in RCTs lasting < 16 weeks (WMD -15.70 mg/dl; $p = 0.048$), and in subjects with hypercholesterolaemia (WMD -12.36 mg/dl; $p = 0.001$) or obesity (WMD -19.35 mg/dl; $p = 0.006$) before RCT enrolment. There was a significant decrease in LDL-C (WMD -14.38 mg/dl; $p = 0.002$) levels in patients with LDL-C ≥ 130 mg/dl before trial enrolment. Resistance training reduced HDL-C (WMD -2.97 mg/dl; $p = 0.01$) levels particularly in subjects with obesity. TG (WMD -10.71 mg/dl; $p = 0.01$) levels decreased particularly when the intervention lasted < 16 weeks. Conclusion: Resistance training can decrease TC, LDL-C and TG levels in postmenopausal females. The impact of resistance training on HDL-C levels was small, and was only observed in individuals with obesity. The effect of resistance training on the lipid profile was more notable in short-term interventions and in postmenopausal women with dyslipidaemia or obesity before trial enrolment.

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Effect of folic acid on the sexual function of postmenopausal women: a triple-blind randomized controlled trial

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Background: There are reports of sexual dysfunction in postmenopausal women, and several treatment recommendations are available. **Aim:** To investigate the effect of folic acid on postmenopausal women's sexual function. **Methods:** This triple-blind randomized controlled trial was conducted in Tehran, Iran, in 2020. A sample of 100 postmenopausal women was recruited from comprehensive health centers affiliated with the Shahid Beheshti University of Medical Sciences. Eligible women were randomly assigned to receive folic acid (5 mg) or placebo on an empty stomach every day for 8 weeks. Women were assessed at 3 time points: baseline and 4 and 8 weeks after the intervention. **Outcome:** Sexual function was the main outcome, as measured by the Female Sexual Function Index. **Results:** The mean \pm SD age of participants in the folic acid and placebo groups was 53.2 ± 3.84 and 54.4 ± 4.05 years, respectively ($P = .609$). The results obtained from mixed effects analysis of variance revealed a statistically significant difference between baseline and posttreatment scores and the interaction between time and group for desire, orgasm, satisfaction, arousal, pain, and total sexual function score, with the folic acid group improving more than control group. Lubrication was the only domain that showed no significant difference for the interaction between time and group. **Clinical implications:** Folic acid may beneficially affect sexual function in postmenopausal women. **Strengths and limitations:** Strengths include the novelty of the subject, the triple-blind design, the block randomization, the administration of a standard scale for sexual function (Female Sexual Function Index), and the affordability and availability of folic acid. This study was conducted with a small sample size and short follow-up time; therefore, interpretation of the results requires great caution. **Conclusion:** The findings suggest that folic acid possibly improves sexual function in postmenopausal women. Larger studies are needed to confirm the findings.

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A systematic review of the relationship between normal range of serum thyroid-stimulating hormone and bone mineral density in the postmenopausal women

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Objective: The aim of this study was adopts meta-analysis in evaluating the correlation between TSH and BMD, as well as osteoporosis in the postmenopausal women with normal thyroid function. **Methods:** Six databases were searched for articles concerning correlation between TSH and BMD in postmenopausal women. The retrieval time was set from the date of database establishment to November 30, 2020. Revman5.3 and Stata12.0 software were used for meta-analysis. **Results:** A total of 19 articles were incorporated. The Summary Fisher' Z of the correlation between TSH and BMD was 0.16, 95% CI (0.00, 0.32), and the correlation coefficient of Summary Fisher' Z conversion was 0.158. Study on the relationship between TSH and osteoporosis based on OR demonstrated that the combined OR was 1.76, 95% CI (1.27, 2.45), $P < 0.05$. The subgroup analyzing results displayed that the risk of osteoporosis of the subjects from community with low TSH was 1.89, 95% CI (1.43, 2.49). The risk of osteoporosis for subjects with low TSH and from hospitals was 1.36, 95% CI (0.46, 3.99); 1.84 for subjects with low TSH and anti-osteoporosis drugs, 95% CI (1.05, 3.22); and 1.74 for those with low TSH but not taking anti-osteoporosis drugs, 95% CI (1.08, 2.82). The dose-response relationship showed that the risk of osteoporosis tended to decrease when TSH was more than 2.5mIU/L. **Conclusion:** The serum TSH is positively related with BMD in postmenopausal women, and high TSH (> 2.5 mIU/L) within the normal range is possibly helpful to decrease the risk of osteoporosis in postmenopausal women.

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Pharmacological interventions and hormonal therapies for depressive symptoms in peri- and post-menopausal women: a network meta-analysis of randomized controlled trials

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Although significant portion of women experience depressive symptoms during or after menopausal transition, there has been considerable controversy over the benefits of hormone replacement therapy (HRT) and antidepressants due to insufficient evidence supporting the superiority of either treatment. This frequentist model based network meta-analysis (NMA) included randomized controlled trials (RCTs) of menopausal depression symptoms management in menopausal women. Seventy RCTs involving a total of 18,530 women (mean age 62.5) were analyzed. The results demonstrated that fluoxetine plus oral HRT [standardized mean difference (SMD)=-1.59, 95% confidence interval (95%CI)=-2.69 to -0.50] were associated with the largest improvement in depressive symptoms than placebos in overall menopausal women. Similar findings were also noted in the subgroup of participants with a definite diagnosis

of depression, while no pharmacological or hormone replacement therapy was better than placebo in the subgroup of post-menopausal women (amenorrhea > 1 year) or in patients without diagnosis of depression. This NMA presented evidence that fluoxetine plus HRT may be beneficial to menopausal women with a definite diagnosis of depression but not to those without depression or post-menopausal women.

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Association of earlier age at menopause with risk of incident dementia, brain structural indices and the potential mediators: a prospective community-based cohort study

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Background: To date, there is no homogeneous evidence of whether earlier age at menopause is associated with incident dementia. In addition, the underlying mechanism and driven mediators are largely unknown. We aimed to fill these knowledge gaps. **Methods:** This community-based cohort study included 154,549 postmenopausal women without dementia at enrolment (between 2006 and 2010) from the UK Biobank who were followed up until June 2021. We followed up until June 2021. Age at menopause was entered as a categorical variable (<40, 40-49, and ≥50 years) with ≥50 years taken as a reference. The primary outcome was all-cause dementia in a time-to-event analysis and the secondary outcomes included Alzheimer's disease, vascular dementia, and other types of dementia. In addition, we investigated the association between magnetic resonance (MR) brain structure indices with earlier menopause, and explored the potential underlying driven mediators on the relationship between earlier menopause and dementia. **Findings:** 2266 (1.47%) dementia cases were observed over a median follow-up period of 12.3 years. After adjusting for confounders, women with earlier menopause showed a higher risk of all-cause dementia compared with those ≥50 years (adjusted-HRs [95% CIs]: 1.21 [1.09-1.34] and 1.71 [1.38-2.11] in the 40-49 years and <40 years groups, respectively; P for trend <0.001). No significant interactions between earlier menopause and polygenic risk score, cardiometabolic factors, type of menopause, or hormone-replacement therapy strata were found. Earlier menopause was negatively associated with brain MR global and regional grey matter indices, and positively associated with white matter hyperintensity. The relationship between earlier menopause and dementia was partially mediated by menopause-related comorbidities including sleep disturbance, mental health disorder, frailty, chronic pain, and metabolic syndrome, with the proportion (95% CI) of mediation effect being 3.35% (2.18-5.40), 1.38% (1.05-3.20), 5.23% (3.12-7.83), 3.64% (2.88-5.62) and 3.01% (2.29-4.40), respectively. Multiple mediator analysis showed a combined effect being 13.21% (11.11-18.20). **Interpretation:** Earlier age at menopause was associated with risk of incident dementia and deteriorating brain health. Further studies are warranted to clarify the underlying mechanisms by which earlier age at menopause is linked to an increased risk of dementia, and to determine public health strategies to attenuate this association.

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Vaginal laser therapy for GSM/VVA: where we stand now - a review by the EUGA Working Group on Laser

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Vulvovaginal atrophy (VVA) is a chronic progressive condition that involves the genital and lower urinary tracts, related to the decrease of serum estrogenic levels when menopause occurs. The definition of genitourinary syndrome of menopause (GSM) is a medically more accurate, all-encompassing and publicly acceptable term than VVA. Due to the chronic progressive trend of GSM, symptoms tend to reappear after the cessation of therapy, and frequently long-term treatment is required. First-line therapies include vulvar and vaginal lubricant or moisturizers, and, in the case of failure, low-dose vaginal estrogens are the preferred pharmacological therapy. Populations of patients, such as breast cancer (BC) survivors, are affected by iatrogenic GSM symptoms with concerns about the use of hormonal therapies. The non-ablative erbium:YAG laser and the fractional microablative CO₂ vaginal laser are the two main lasers evaluated for GSM treatment. The aim of this comprehensive review is to report the efficacy and safety of Er:YAG and CO₂ vaginal lasers for GSM treatment. Vaginal laser therapy has been demonstrated to be effective in restoring vaginal health, improving VVA symptoms and sexual function. The data suggest that both Er:YAG and CO₂ vaginal lasers are safe energy-based therapeutic options for management of VVA and/or GSM symptoms in postmenopausal women and BC survivors.

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Early menopause and premature ovarian insufficiency are associated with increased risk of dementia: A systematic review and meta-analysis of observational studies

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Background/aims: Among other risk factors, the decline in estrogen concentrations during menopause may compromise cognitive function. Whether early menopause (EM) is associated with an increased risk of dementia remains unclear. The purpose of this study was to systematically review and meta-analyze current evidence regarding the association between EM or premature ovarian insufficiency (POI) and the risk of dementia of any type.

Materials and methods: A comprehensive literature search was conducted through the PubMed, Scopus and CENTRAL databases up to August 2022. Study quality was assessed using the Newcastle-Ottawa scale. Associations were calculated as odds ratio (OR) with 95 % confidence interval (CI). The I² index was employed for heterogeneity.

Results: Eleven studies (nine assessed as of good and two as of fair quality) were included in the meta-analysis (n = 4,716,862). Women with EM demonstrated a greater risk of dementia of any type than women of normal age at menopause (OR 1.37, 95 % CI 1.22-1.54; I² 93%). However, after excluding a large retrospective cohort study, the results were altered (OR 1.07, 95 % CI 0.78-1.48; I² 94%). Increased risk of dementia was also found in women with POI (OR 1.18, 95 % CI 1.15-1.21; I² 0%). Subgroup analysis showed that this risk was mostly evident in cohort studies, and those which included women with natural menopause. **Conclusions:** Women with EM or POI may be at increased risk of dementia compared with women of normal age at menopause, but further research investigating that hypothesis is warranted.