Selección de Resúmenes de Menopausia

Semana del 18 a 24 de octubre, 2023

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Br J Nutr. 2023 Oct 23:1-38. doi: 10.1017/S0007114523002362. Online ahead of print.

Effect of Probiotics on Postmenopausal Bone Health: A Preclinical Meta-Analysis

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Postmenopausal osteoporosis is a major concern for women worldwide, due to increased risk of fractures and diminished bone quality. Recent research on gut microbiota have suggested that probiotics can combat various diseases, including postmenopausal bone loss. Although several pre-clinical studies have explored the potential of probiotics in improving postmenopausal bone loss, the results have been inconsistent, and the mechanism of action remains unclear.To address this, a meta-analysis was conducted to determine the effect of probiotics on animal models of postmenopausal osteoporosis. The bone parameters studied were Bone Mineral Density (BMD), Bone Volume Fractions (BV/TV), and hallmarks of bone formation and resorption.Pooled analysis showed that probiotic treatment significantly improves BMD and BV/TV of the ovariectomised animals. Probiotics, while not statistically significant, exhibited a tendency toward enhancing bone formation and reducing bone resorption. Next, we compared the effects of Lactobacillus sp. and Bifidobacterium sp. on osteoporotic bone. Both probiotics improved BMD and BV/TV compared to control, but Lactobacillus sp. had a larger effect size. In conclusion, our findings suggest that probiotics have the potential to improve bone health and prevent postmenopausal osteoporosis. However, further studies are required to investigate the effect of probiotics on postmenopausal bone health in humans.

Cureus. 2023 Sep 20;15(9):e45597. doi: 10.7759/cureus.45597. eCollection 2023 Sep.

The Correlation Between Progesterone and Mammographic Density in Postmenopausal Women: A Systematic Review of the Literature and Meta-Analysis

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Higher mammographic breast density in premenopausal and postmenopausal women is related to a higher breast cancer risk. In this review, we analyze the correlation between estrogen, progesterone, and mammographic density in postmenopausal women and clarify whether these findings are consistent across different types of mammographic breast density. We extracted data concerning mammographic density increases in the populations treated with estrogen-only hormone replacement therapy and those treated with estrogen and progestin hormone replacement therapy. Postmenopausal women treated with estrogen and progesterone regimens had a statistically significant lesser mammographic density increase than estrogen-only hormone replacement therapy regimens.

Front Clin Diabetes Healthc. 2023 Oct 6:4:1272804. doi: 10.3389/fcdhc.2023.1272804. eCollection 2023.

Vascular deficits contributing to skeletal fragility in type 1 diabetes

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Over 1 million Americans are currently living with T1D and improvements in diabetes management have increased the number of adults with T1D living into later decades of life. This growing population of older adults with diabetes is more susceptible to aging comorbidities, including both vascular disease and osteoporosis. Indeed, adults with T1D have a 2- to 3- fold higher risk of any fracture and up to 7-fold higher risk of hip fracture compared to those without diabetes. Recently, diabetes-related vascular deficits have emerged as potential risks factors for impaired bone blood flow and poor bone health and it has been hypothesized that there is a direct pathophysiologic link between vascular disease and skeletal outcomes in T1D. Indeed, microvascular disease (MVD), one of the most serious consequences of diabetes, has been linked to worse bone microarchitecture in older adults with T1D compared to their counterparts without MVD. The association between the presence of microvascular complications and compromised bone microarchitecture indicates the potential direct deleterious effect of vascular compromise, leading to abnormal skeletal blood flow, altered bone remodeling, and deficits in bone structure. In addition, vascular diabetic complications are characterized by increased vascular calcification, decreased arterial distensibility, and vascular remodeling with increased arterial stiffness and thickness of the vessel walls. These extensive alterations in vascular structure lead to impaired myogenic control and reduced nitric-oxide mediated vasodilation, compromising regulation of blood flow across almost all vascular beds and

significantly restricting skeletal muscle blood flow seen in those with T1D. Vascular deficits in T1D may very well extend to bone, compromising skeletal blood flow control, and resulting in reduced blood flow to bone, thus negatively impacting bone health. Indeed, several animal and ex vivo human studies report that diabetes induces microvascular damage within bone are strongly correlated with diabetes disease severity and duration. In this review article, we will discuss the contribution of diabetes-induced vascular deficits to bone density, bone microarchitecture, and bone blood flow regulation, and review the potential contribution of vascular disease to skeletal fragility in T1D.

Br J Cancer. 2023 Oct 21. doi: 10.1038/s41416-023-02407-7.

Menopausal hormone therapy use and risk of ovarian cancer by race: the ovarian cancer in women of African ancestry consortium

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Background: Most studies examining post-menopausal menopausal hormone therapy (MHT) use and ovarian cancer risk have focused on White women and few have included Black women.Methods: We evaluated MHT use and ovarian cancer risk in Black (n = 800 cases, 1783 controls) and White women (n = 2710 cases, 8556 controls), using data from the Ovarian Cancer in Women of African Ancestry consortium. Logistic regression was used to estimate odds ratios (ORs) and 95% confidence intervals (CIs) for the association of MHT use with ovarian cancer risk, examining histotype, MHT type and duration of use. Results: Long-term MHT use, ≥10 years, was associated with an increased ovarian cancer risk for White women (OR = 1.38, 95%CI: 1.22-1.57) and the association was consistent for Black women (OR = 1.20, 95%CI: 0.81-1.78, pinteraction = 0.4). For White women, the associations between long-term unopposed estrogen or estrogen plus progesterone use and ovarian cancer risk were similar; the increased risk associated with long-term MHT use was confined to high-grade serous and endometroid tumors. Based on smaller numbers for Black women, the increased ovarian cancer risk associated with long-term MHT use was apparent for unopposed estrogen use and was predominately confined to other epithelial histotypes. Conclusion: The association between long-term MHT use and ovarian cancer risk was consistent for Black and White women.

Front Endocrinol (Lausanne). 2023 Oct 3:14:1265470. doi: 10.3389/fendo.2023.1265470. eCollection 2023.

Disturbed sleep is associated with reduced verbal episodic memory and entorhinal cortex volume in younger middle-aged women with risk-reducing early ovarian removal

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Introduction: Women with early ovarian removal (<48 years) have an elevated risk for both late-life Alzheimer's disease (AD) and insomnia, a modifiable risk factor. In early midlife, they also show reduced verbal episodic memory and hippocampal volume. Whether these reductions correlate with a sleep phenotype consistent with insomnia risk remains unexplored. Methods: We recruited thirty-one younger middleaged women with risk-reducing early bilateral salpingo-oophorectomy (BSO), fifteen of whom were taking estradiol-based hormone replacement therapy (BSO+ERT) and sixteen who were not (BSO). Fourteen age-matched premenopausal (AMC) and seventeen spontaneously peri-postmenopausal (SM) women who were ~10y older and not taking ERT were also enrolled. Overnight polysomnography recordings were collected at participants' home across multiple nights (M=2.38 SEM=0.19), along with subjective sleep quality and hot flash ratings. In addition to group comparisons on sleep measures, associations with verbal episodic memory and medial temporal lobe volume were assessed. Results: Increased sleep latency and decreased sleep efficiency were observed on polysomnography recordings of those not taking ERT, consistent with insomnia symptoms. This phenotype was also observed in the older women in SM, implicating ovarian hormone loss. Further, sleep latency was associated with more forgetting on the paragraph recall task, previously shown to be altered in women with early BSO. Both increased sleep latency and reduced sleep efficiency were associated with smaller anterolateral entorhinal cortex volume.Discussion: Together, these findings confirm an association between ovarian hormone loss and insomnia symptoms, and importantly, identify an younger onset age in women with early ovarian removal, which may contribute to poorer cognitive and brain outcomes in these women.

Semin Arthritis Rheum. 2023 Oct 13:63:152280. doi: 10.1016/j.semarthrit.2023.152280. Online ahead of print.

Menopausal hormone therapy and risk of seropositive rheumatoid arthritis: A nationwide cohort study in Korea

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Objectives: This retrospective cohort study aimed to investigate the impact of menopausal hormone therapy (MHT) on the incidence of rheumatoid arthritis (RA) in postmenopausal women and to examine the effects of each specific MHT drug. Methods: In this Korean population-based cohort study, 452,124 women aged > 40 years who consulted a healthcare provider for menopause were evaluated from January 1, 2011, to December 31, 2014. After propensity score matching, 138,991 pairs were included in the MHT and non-MHT groups. Participants were followed up until December 31, 2020. RA was defined according to the International Classification of Diseases, 10th edition, limited to seropositive RA (M05). Results: RA developed in 567 (0.4 %) of the 138,424 patients in the MHT group. The RA risk in the MHT group was not significantly increased compared with that of controls (hazard ratio [HR] 1.12, 95 % confidence interval [CI] 0.998-1.256). However, MHT use for ≤ 3 years was associated with an increased risk of RA (HR 1.277, 95 % CI 1.127-1.447). When estrogen/progestogen was used, the HR was 1.24 (95 % CI 1.05-1.46), whereas when tibolone was used, the HR was 1.33 (95 % CI 1.13-1.57). Conclusion: The use of MHT did not show a significant impact on the development of RA in postmenopausal women. However, a subanalysis that specifically examined the duration of MHT revealed a noteworthy increase in the risk of RA during the initial 3 years of MHT use.

Obstet Gynecol. 2023 Nov 1;142(5):1266-1273. doi: 10.1097/AOG.0000000000005395.

Compounded Bioidentical Menopausal Hormone Therapy: ACOG Clinical Consensus No. 6

Many compounding pharmacies use the phrase "bioidentical hormone" as a marketing term to imply that these preparations are natural and, thus, safer and more effective than U.S. Food and Drug Administration (FDA)-approved menopausal medications that use bioidentical or synthetic hormones or both. However, evidence to support marketing claims of safety and effectiveness is lacking. Compounded bioidentical menopausal hormone therapy should not be prescribed routinely when FDA-approved formulations exist. Clinicians should counsel patients that FDA-approved menopausal hormone therapies are recommended for the management of menopausal symptoms over compounded bioidentical menopausal hormone therapy. If a patient requests the use of compounded bioidentical menopausal hormone therapy, clinicians should educate them on the lack of FDA approval of these preparations and their potential risks and benefits, including the risks specific to compounding. To truly understand the benefits and harms of compounded bioidentical menopausal hormone therapy, high quality placebo-controlled randomized controlled trials with long-term follow-up comparing custom-compounded products with FDA-approved menopausal hormone therapy are needed.

BJPsych Open. 2023 Oct 17;9(6):e194. doi: 10.1192/bjo.2023.579.

The role of oestrogen therapy in reducing risk of Alzheimer's disease: systematic review

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Background: Studies have shown a relationship between oestrogen and Alzheimer's disease. However, there is neither clear nor strong evidence on the use of oestrogen-only therapy in reducing the risk of Alzheimer's disease.

Aims: To assess the effects of oestrogen-only therapy on reducing the risk of Alzheimer's disease. Method: Inclusion criteria was determined with the PICO framework. Outcome was cognitive function measured by neuropsychological tests and strict protocols. Exclusion criteria included non-Alzheimer's dementia, progesterone-only therapy and pre-menopausal women. Searches were conducted in nine electronic healthcare databases, last searched in July 2022. Quality assessments conducted on randomised controlled trials (RCTs) were performed with the GRADE assessment, and cohort studies and case-control studies were assessed with the Newcastle-Ottawa Scale. Extracted data were used to analyse participants, interventions and outcomes. Results: Twenty-four studies satisfied the search criteria (four RCTs, nine cohort studies, 11 case-control studies). Fifteen studies showed positive associations for oestrogen-only therapy reducing the risk of Alzheimer's disease, and the remaining nine found no evidence of association. Conclusions: Fifteen studies showed that oestrogen-only therapy effectively reduced the risk of Alzheimer's disease, whereas nine showed no correlation. Studies also investigated oestrogen-related variables such as length of oestrogen exposure, being an apolipoprotein E ε4 carrier and concomitant use of non-steroidal anti-inflammatory drugs, and their role in neuroprotection. This review was limited by the limited ranges of duration of oestrogen treatment and type of oestrogen-only therapy used. In conclusion, oestrogen-only therapy has potential for use in preventing Alzheimer's disease, although current evidence is inconclusive and requires further study.