



## Selección de Resúmenes de Menopausia

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### Cardiovascular risks associated with calcium supplementation in patients with osteoporosis: a nationwide cohort study

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 Aims: This study aimed to evaluate the real effects of calcium supplementation on cardiovascular outcomes within a population-based cohort. Methods and results: From a nationwide health screening database in Korea, a total of 11,297 patients with osteoporosis who had taken calcium supplementation with or without vitamin D for at least 90 days (total-calcium group; calcium supplementation only [CaO], n = 567; calcium supplementation in combination with vitamin D [CaD], n = 10,730) were matched at a 1:1 ratio to patients who had not taken calcium supplements (control group) by using propensity scores. The overall mean age was  $59.9 \pm 8.8$  years and the percentage of women was 87.9% in our study population. Over a median follow-up of 54 months, the incidence rate of composite cardiovascular diseases (CVD) per 1000 person-years was not different between the groups: 9.73 in the total-calcium group and 8.97 in the control group (adjusted hazard ratio [HR]: 1.12; 95% confidence interval [CI]: 0.99 to 1.28; P = 0.08). However, calcium supplementation without vitamin D was associated with an increased risk of composite CVD (HR: 1.54; 95% CI: 1.17 to 2.04; P < 0.01), especially non-fatal myocardial infarction (HR: 1.89; 95% CI: 1.23 to 2.91; P < 0.01), compared with no calcium supplementation. Conclusion: Our population-based study supported that taking calcium supplementation with vitamin D together did not appear to be harmful to cardiovascular health, but reminding that calcium supplementation without vitamin D should be used carefully even in populations with low dietary calcium intake.

**Sci Rep. 2021 Jul 9;11(1):14179.doi: 10.1038/s41598-021-93483-3.**

### Differences in the level of physical fitness and mobility among older women with osteoporosis and healthy women-cross-sectional study

Anna Szczygielska Babiuch<sup>1,2</sup>, Katarzyna Oestervemb<sup>3</sup>, Anna Lipińska, Magdalena Lipińska Stańczak, et al.  
 The main aim of the study was to assess the risk of falls, and physical fitness in the group of women aged 60 to 65 years of age suffering from an identified osteoporosis in comparison to a similar group of healthy women. The main question was: What is the level of physical fitness and risk of fall among women with osteoporosis compared to healthy women? The research included 262 women aged 60 to 65 of age: 135 with osteoporosis and 127 healthy ones, living in the Małopolskie and the Świętokrzyskie Provinces of Poland. To assess the level of physical fitness, the Senior Fitness Test (SFT) was used, while the Tinetti POMA (Performance Oriented Mobility Assessment) and Timed Up&Go test (TUG) were used to assess the risk of fall. Significant statistical differences in average results of physical fitness assessment were noticed as regards the following aspects: flexibility of the lower body part p < 0.001; flexibility of the upper body part p < 0.001. Essential differences were demonstrated in assessing the risk of falling with p < 0.01. Women with osteoporosis are marked by a lower physical fitness than healthy women. A higher percentage of great and serious risk of fall was demonstrated among women with osteoporosis.

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### The Role of Androgens in Women's Health and Wellbeing

Vittorio E Bianchi<sup>1</sup>, Elena Bresciani<sup>2</sup>, Ramona Meanti<sup>3</sup>, Laura Rizzi, Robert J Omeljaniuk, Antonio Torsello.  
 Androgens in women, as well as in men, are intrinsic to maintenance of (i) reproductive competency, (ii) cardiac health, (iii) appropriate bone remodeling and mass retention, (iii) muscle tone and mass, and (iv) brain function, in part, through their mitigation of neurodegenerative disease effects. In recognition of the pluripotency of endogenous androgens, exogenous androgens, and selected congeners, have been prescribed off-label for several decades to treat low libido and sexual dysfunction in menopausal women, as well as, to improve physical performance. However, long-term safety and efficacy of androgen administration has yet to be fully elucidated. Side effects often observed include (i) hirsutism, (ii) acne, (iii) deepening of the voice, and (iv) weight gain but are associated most frequently with supra-physiological doses. By contrast, short-term clinical trials suggest that the use of low-dose testosterone therapy in

women appears to be effective, safe and economical. There are, however, few clinical studies, which have focused on effects of androgen therapy on pre- and post-menopausal women; moreover, androgen mechanisms of action have not yet been thoroughly explained in these subjects. This review considers clinical effects of androgens on women's health in order to prevent chronic diseases and reduce cancer risk in gynecological tissues.

**Climacteric. 2021 Aug;24(4):408-414.doi: 10.1080/13697137.2021.1915271.**

### **Fracture recurrence in hip fracture with menopausal hormone therapy versus risedronate: a clinical trial**

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Objectives: An open-label, randomized trial was conducted to examine the effects of risedronate versus menopausal hormone therapy (MHT) in postmenopausal women with recent hip fracture. Methods: Among 1165 eligible women, 281 were recruited and randomly assigned to receive oral risedronate (35 mg/week) or percutaneous estradiol gel (1.5 mg/day) plus oral micronized progesterone (100 mg/day) for 4 years. The primary end point was recurrent fracture and the secondary end points were mortality and bone mineral density (BMD). Results: Kaplan-Meier analyses showed no significant differences in fracture recurrence and mortality between the two groups. The incidence of any new fracture per 100 person-years (PY) was 8.63 in the risedronate group and 12.86 in the MHT group ( $p = 0.180$ ); that of clinical fracture was 4.75 and 6.99, respectively ( $p = 0.265$ ); and that of asymptomatic vertebral fracture was 4.87 and 5.58, respectively ( $p = 0.764$ ). The respective incidence of death per 100 PY was 3.58 and 4.40 ( $p = 0.503$ ). BMD increased comparably at the lumbar spine in both groups. BMD at the total hip did not change in the risedronate group, but increased significantly by 2.8% in the MHT group. Conclusions: MHT might not differ from risedronate in the prevention of secondary fractures and death among postmenopausal women with recent hip fracture.

**Curr Neurol Neurosci Rep. 2021 Jul 6;21(9):46.doi: 10.1007/s11910-021-01133-y.**

### **A Lifecourse Perspective on Female Sex-Specific Risk Factors for Later Life Cognition**

Amalia Peterson 1 , Sarah E Tom 2

Purpose of review: The prevalence of Alzheimer's disease and related dementias is greater in women compared to men. We provide a review of female sex-specific risk factors across the lifecourse for cognition in older adulthood, highlighting areas that need further study. Recent findings: Pregnancy may affect late-life cognition, with adverse pregnancy outcomes associated with an increased risk of cognitive decline but parity providing a protective effect. Cumulative estrogen exposure, influenced by age of menarche, menopause, and exogenous estrogen use, may modify a woman's risk for dementia. Menopause transition-associated symptoms may impact cognitive health at the time of the symptoms, but long-term effects remain unknown. As compared to natural menopause, surgical menopause seems to increase the risk for cognitive impairment. Studies that have assessed the association between women's reproductive health and cognition have produced conflicting results. Future studies that address these inconsistencies among diverse populations are needed to better care for women throughout their lives.

**Handb Clin Neurol. 2021;179:455-460.doi: 10.1016/B978-0-12-819975-6.00029-7.**

### **The neuroendocrinology of the preoptic area in menopause: Symptoms and therapeutic strategies**

Manish Modi 1 , Waljit Singh Dhillon 2

The preoptic area of the hypothalamus is the central hub of thermoregulation in mammals, coordinating autonomic heat-effector pathways in response to sensory information from the ambient and internal environment. This aims to maintain temperature homeostasis at a predetermined thermoregulatory set-point. However, hormonal and neuronal changes during the menopause, including estrogen deficiency, disrupt these normal thermoregulatory responses. This results in abnormal activation of heat dissipation effectors, manifesting clinically as hot flush symptoms. Neurokinin B (NKB) signaling via the neurokinin-3 receptor (NK3R) within the preoptic area is thought to play an important role in the pathophysiology of hot flushes. Therefore attenuation of the NKB/NK3R signaling pathway has garnered much interest as a novel therapeutic target for the amelioration of menopausal hot flushes. Recent clinical trials have demonstrated that NK3R antagonists can produce rapid and sustained improvements in hot flush frequency, severity,

and quality of life, without the need for estrogen exposure. Therefore NK3R antagonists are fast emerging as a safe and efficacious alternative to hormone replacement therapy, the current gold standard of treatment.

**Maturitas. 2021 Jun 20;S0378-5122(21)00105-5.doi: 10.1016/j.maturitas.2021.06.005. Online ahead of print.**

### **Vaginal laser therapy for genitourinary syndrome of menopause-systematic review**

Eduard Mension, Inmaculada Alonso, Marta Tortajada, Isabel Matas, Sílvia Gómez, Laura Ribera, et al.

Background: Genitourinary syndrome of menopause (GSM) can have a great impact on the quality of life (QOL), and affects between 53.8% and 90% of postmenopausal women. The literature suggests that vaginal laser therapy could be an effective treatment for GSM symptoms, but its efficacy and safety have not been established and international societies do not endorse its use. Despite that, there has been an increase in the use of vaginal laser therapy globally over the last decade. Objective: The objective of this review is to evaluate the literature which assesses the efficacy and safety of the vaginal laser therapy in the treatment of GSM. Methods: A comprehensive literature search was conducted electronically using Embase and PubMed to retrieve studies assessing evidence for the efficacy and safety of vaginal laser therapy for GSM or vulvovaginal atrophy up to June 2021. Results: A total of 64 studies were finally included in the review. There were 10 controlled intervention studies, 7 observational cohort and cross-sectional studies and 47 before-after studies without a control group. Conclusion: Vaginal laser seems to improve scores on the Visual Analogue Scale (VAS), Female Sexual Function Index (FSFI) and Vaginal Health Index (VHI) in GSM over the short term. Safety outcomes are underreported and short-term. Further well-designed clinical trials with sham-laser control groups and evaluating objective variables are needed to provide the best evidence on efficacy.

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### **Is Alcohol Consumption Associated with Early Menopause Risk?**

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Earlier age at menopause is associated with increased long-term health risks. Moderate alcohol intake has been suggested to delay menopause onset, but it is unknown whether alcohol subtypes are associated with early menopause onset at age 45. Therefore, we aimed to evaluate risk of early natural menopause among n=107,817 Nurses' Health Study II members followed from 1989-2011. Alcohol consumption overall, and by subtypes including beer, red wine, white wine, and liquor was assessed throughout follow-up. We estimated hazard ratios (HR) in multivariable models adjusting for age, body mass index, parity, smoking and other potential confounders. Women reporting moderate, current alcohol consumption had lower risks of early menopause than non-drinkers. Those reporting 10-14.9 g/day had lower risk of early menopause compared to non-drinkers (HR = 0.81, 95% confidence interval (CI): 0.68, 0.97). Among specific beverages, evidence of lower early menopause risk was confined to white wine, and potentially red wine and liquor, but not to beer. Data from this large prospective study suggest a weak association of moderate alcohol intake with lower risk of early menopause, which was most pronounced for consumption of white and red wine, and liquor. High consumption was not related to lower early menopause risk.

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### **Bisphosphonates, Bone and Joint Pain**

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Purpose of review: Bisphosphonates (BPs) have an established role in a number of diseases including osteoporosis, but the role of BPs for treating symptomatic conditions other than bone metastases is less clear. We review recent data on the efficacy of BPs in the treatment of symptomatic bone and joint pain with osteoarthritis (OA) as an example. Recent findings: Although controversial, BPs have been reported to improve pain ratings, imaging features, and inflammatory markers in patients with arthritis, more specifically OA. It is possible that their effects in periarticular bone strongly influence the complex inflammatory process within the joints. Recent data also suggests that they can potentially impact synovial and synoviocytes and macrophages. Although more studies are needed to define their contribution in clinical practice, increasing evidence suggests they hold an important function, especially in conditions with periarticular bone involvement such as OA. Although BPs are indicated primarily for prevention and treatment of osteoporosis, they can also have potential effects on the inflammatory process of other conditions, including OA. Improvements in pain scale ratings, periarticular findings through imaging, and inflammatory response suggest their potential extra-osteoporotic properties.