



## Selección de Resúmenes de Menopausia

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**Osteoporos Int. 2023 Jul 1. doi: 10.1007/s00198-023-06817-4. Online ahead of print.**

### Update on the clinical use of trabecular bone score (TBS) in the management of osteoporosis: results of an expert group meeting organized by the ESCEO, and the IOF

Enisa Shevroja 1, Jean-Yves Reginster 2 3, Olivier Lamy 1, Nasser Al-Daghri 4, Manju Chandran 5, et al.

Trabecular bone score (TBS) is a grey-level textural measurement acquired from dual-energy X-ray absorptiometry lumbar spine images and is a validated index of bone microarchitecture. In 2015, a Working Group of the European Society on Clinical and Economic Aspects of Osteoporosis, Osteoarthritis and Musculoskeletal Diseases (ESCEO) published a review of the TBS literature, concluding that TBS predicts hip and major osteoporotic fracture, at least partly independent of bone mineral density (BMD) and clinical risk factors. It was also concluded that TBS is potentially amenable to change as a result of pharmacological therapy. Further evidence on the utility of TBS has since accumulated in both primary and secondary osteoporosis, and the introduction of FRAX and BMD T-score adjustment for TBS has accelerated adoption. This position paper therefore presents a review of the updated scientific literature and provides expert consensus statements and corresponding operational guidelines for the use of TBS.

**Medicine (Baltimore). 2023 Jun 30;102(26):e34066. doi: 10.1097/MD.00000000000034066.**

### Age at menopause was not associated with microvascular complications in patients with type 2 diabetes mellitus

Shuyao Sun 1 2, Rong Du 1 2, Suyuan Wang 1 2, Yanhong Guo 1 2, Hua He 1 2, Xi Wang 1 2, Dan Zhang, et al.

This study aimed to determine whether there is an association between the age at menopause (AM) and diabetic microvascular complications. This cross-sectional study included 298 postmenopausal women with type 2 diabetes mellitus. They were divided into 3 groups according to AM (in years; group 1: AM < 45 years, n = 32; group 2: 45 ≤ AM < 50 years, n = 102; group 3: AM ≥ 50 years, n = 164). Clinical data related to the duration of type 2 diabetes, body mass index, smoking status, hypertension status, AM, biochemical indices, and diabetic microvascular complications (retinopathy, nephropathy, and neuropathy) were collected. Logistic regression analysis was performed to identify the association between the AM and diabetic microvascular complications. No statistical differences were observed in the prevalence of diabetic retinopathy, chronic kidney disease, or diabetic peripheral neuropathy between the groups. After adjusting for possible confounders, AM did not correlate with the presence of diabetic retinopathy ( $\beta = 1.03$ , 95% confidence interval [CI]: 0.94-1.14,  $P = .511$ ), chronic kidney disease ( $\beta = 1.04$ , 95% CI: 0.97-1.12,  $P = .280$ ), and diabetic peripheral neuropathy ( $\beta = 1.01$ , 95% CI: 0.93-1.09,  $P = .853$ ). Our findings suggest that early menopause (age < 45 years) was not associated with microvascular diabetic complications. Further prospective studies are needed to clarify this issue.

**Sci Rep. 2023 Jun 29;13(1):10572. doi: 10.1038/s41598-023-37687-9.**

### Skin cancer risk of menopausal hormone therapy in a Korean cohort

Jin-Sung Yuk 1, Soo-Kyung Lee 2, Ji An Uh 2, Yong-Soo Seo 1, Myounghwan Kim 1, Myoung Shin Kim.

Conflicting studies exist on the association between menopausal hormone therapy (MHT) and skin cancers, such as melanoma and non-melanoma skin cancer (NMSC). This retrospective cohort study aimed to evaluate the risk of skin cancer from MHT using data from 2002 to 2019 from the National Health Insurance Service in South Korea. We included 192,202 patients with MHT and 494,343 healthy controls. Women > 40 years who had menopause between 2002 and 2011 were included. Patients with MHT had at least one MHT for at least 6 months and healthy controls had never been prescribed MHT agents. We measured the incidence of melanoma and NMSC. Melanoma developed in 70 (0.03%) patients with MHT and 249 (0.05%) controls, while the incidence of NMSC was 417 (0.22%) in the MHT group and 1680 (0.34%) in the controls. Tibolone (hazard ratio [HR] 0.812, 95% confidence interval [CI] 0.694-0.949) and combined oestrogen plus progestin by the manufacturer (COPM; HR 0.777, 95% CI 0.63-0.962) lowered the risk of NMSC, while other hormone groups did not change the risk. Overall, MHT was not associated with melanoma

incidence in menopausal Korean women. Instead, tibolone and COPM were associated with a decrease in NMSC occurrence.

**Front Physiol. 2023 Jun 12;14:1211896. doi: 10.3389/fphys.2023.1211896. (FREE in PubMed)**

### **The role of vitamin D in menopausal women's health**

Zhaojun Mei 1, Hong Hu 2, Yi Zou 3, Dandan Li 4

Vitamin D (VD) is known to play an important role in the maintenance of calcium homeostasis and bone metabolism. In recent years, there has also been a growing interest in Vitamin D for health issues beyond the bones. Menopausal women are at risk of reduced bone density and increased risk of fracture due to a decline in estrogen levels. There is also an increased risk of cardiovascular disease, diabetes and hyperlipidaemia due to impaired lipid metabolism. The menopausal and emotional symptoms due to menopause are also increasingly prominent. This article summarizes the role of Vitamin D in menopausal women's health, including the effects of Vitamin D on skeletal muscle, cardiovascular disease, Genitourinary Syndrome of Menopause (GSM), cancer and emotional symptoms. Vitamin D regulates the growth of vaginal epithelial cells and alleviates genitourinary tract problems in menopausal women. Vitamin D also modulates immune function and influences the production of adipokines. Vitamin D and its metabolites also have an anti-proliferative effect on tumour cells. This narrative review, by summarizing recent work on the role of Vitamin D in menopausal women and in animal models of menopause, aims to provide a basis for further development of the role of Vitamin D in the health of menopausal women.

**Medicina (Kaunas). 2023 Jun 20;59(6):1177. doi: 10.3390/medicina59061177.**

### **Association of Coffee and Tea Intake with Bone Mineral Density and Hip Fracture: A Meta-Analysis**

Chun-Ching Chen 1, Yu-Ming Shen 1, Siou-Bi Li 2, Shu-Wei Huang 3, Yi-Jie Kuo 3 4, Yu-Pin Chen 3 4

**Background and Objectives:** Osteoporosis is characterized by low bone mass and high bone fragility. Findings regarding the association of coffee and tea intake with osteoporosis have been inconsistent. We conducted this meta-analysis to investigate whether coffee and tea intake is associated with low bone mineral density (BMD) and high hip fracture risk. **Materials and Methods:** PubMed, MEDLINE, and Embase were searched for relevant studies published before 2022. Studies on the effects of coffee/tea intake on hip fracture/BMD were included in our meta-analysis, whereas those focusing on specific disease groups and those with no relevant coffee/tea intake data were excluded. We assessed mean difference (MD; for BMD) and pooled hazard ratio (HR; for hip fracture) values with 95% confidence interval (CI) values. The cohort was divided into high- and low-intake groups considering the thresholds of 1 and 2 cups/day for tea and coffee, respectively. **Results:** Our meta-analysis included 20 studies comprising 508,312 individuals. The pooled MD was 0.020 for coffee (95% CI, -0.003 to 0.044) and 0.039 for tea (95% CI, -0.012 to 0.09), whereas the pooled HR was 1.008 for coffee (95% CI, 0.760 to 1.337) and 0.93 for tea (95% CI, 0.84 to 1.03). **Conclusions:** Our meta-analysis results suggest that daily coffee or tea consumption is not associated with BMD or hip fracture risk.

**J Prev Alzheimers Dis. 2023;10(3):530-535. doi: 10.14283/jpad.2023.28.**

### **Reproductive Markers in Alzheimer's Disease Progression: The Framingham Heart Study**

H Ding 1, Y Li, T F A Ang, Y Liu, S Devine, R Au, P M Doraiswamy, C Liu

**Background:** Reproductive status, such as the age of menarche or menopause, may be linked to cognitive abilities and risk for incident Alzheimer's disease (AD) but the evidence is conflicting. It is also not fully known if these factors interact with cortical beta-amyloid deposition. **Objectives:** To study the relationship between reproductive risks, sex hormone markers and risk for decline in specific cognitive domains in women. **Design, setting and participants:** We analyzed the association of reproductive markers (age at menarche, number of births, age at menopause, sex hormone-binding globulin, estradiol, estrone, total testosterone, free testosterone) with incident AD and annualized cognitive decline in the community-based longitudinal Framingham Heart Study (FHS) Offspring women 60 years and older (n=772, mean age 68 years, mean follow-up 10.7 ± 3 years). We used the Cox proportional hazards regression model and linear regression model, adjusting for covariates. **Outcome measures:** Incident AD dementia as well as the annualized change in memory, language, attention and executive functions.

Results: Older age at menopause was associated with a lower risk of incident AD dementia ( $p = 0.047$ , 6% lower risk per older year) after adjusting for baseline age, education, hormone therapy status, and MMSE score. Older age at menopause was significantly associated with a slower annualized decline in memory ( $\beta = 0.085$ ,  $p = 0.00059$ ). The lower level of plasma A $\beta$ 42 was also associated with a higher risk of incident AD (HR = 0.97, 95% CI = 0.95, 0.99;  $p = 0.0039$ ) but there was no significant interaction effect with age at menarche, age at menopause or plasma sex hormone levels. Conclusion: Younger age at menopause is a risk factor for late-life memory decline and incident AD. This risk appears to be independent of A $\beta$ 42 pathology. Further studies to understand the biological and social mechanisms underlying the differential effects of reproductive risks are warranted.

**Clin Breast Cancer. 2023 Jun 14;S1526-8209(23)00155-6. doi: 10.1016/j.clbc.2023.06.003. Online ahead of print.**  
**Low Serum Vitamin D Associated with Increased Tumor Size and Higher Grade in Premenopausal Canadian Women with Breast Cancer**

Amit Manocha 1, Nigel T Brockton 2, Linda Cook 3, Karen A Kopciuk 4

Introduction: This study investigated the association of Vitamin D with tumor characteristics in pre and postmenopausal women. Patients and methods: A prospective cohort of 476 women with incident stage I-III breast cancer (BC) in Alberta, Canada comprised the study population. Vitamin D was measured as 25(OH)D concentration in serum samples collected at diagnosis (presurgery and prior to treatment initiation). Tumor characteristics including size, grade, receptor status, stage and nodal status were evaluated in regression models for association with Vitamin D and measured cytokines in models adjusted for menopausal status. Results: More than half of the women were diagnosed as stage I and Luminal A/B, most were postmenopausal, had sufficient Vitamin D levels, and were 56.6 years of age on average. Higher vitamin D levels were associated with decreased tumor size for all women with larger effect seen in premenopausal status. Insufficient vitamin D levels were significantly associated with increased risk of higher grade, but only in premenopausal women. Elevated human granulocyte macrophage colony-stimulating factor was an independent risk factor associated with increased risk of higher-grade tumors. Conclusion: Women with sufficient Vitamin D levels at BC diagnosis had smaller and lower grade tumors compared to women with insufficient vitamin D, especially among premenopausal women. Maintaining adequate vitamin D levels in premenopausal women could improve prognostically important BC characteristics at diagnosis.