Selección de Resúmenes de Menopausia

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Premature Ovarian Insufficiency and Long-Term Health Consequences.

Tsiligiannis S, Panay N, Stevenson JC.

Premature ovarian insufficiency (POI) is defined as the cessation of ovarian function before the age of 40 years. The trio of amenorrhea, elevated gonadotropins and oestrogen deficiency is associated with long-term health consequences including increased cardiovascular disease (CVD), decreased bone mineral density (BMD), significantly reduced fertility, psychological distress, vulvovaginal atrophy, neurological effects and overall reduced life expectancy. There are deficits in our understanding of this condition and subsequently the long-term health consequences. The underlying aetiology of POI and the optimal management strategies are also poorly understood. Our knowledge of long-term cardiovascular consequences specifically relating to women with POI is limited as most data on the subject are derived from studies involving women who experienced menopause at the natural age (after 40 years with an average age of 51).

Int J Vitam Nutr Res. 2019 Feb 28:1-7. doi: 10.1024/0300-9831/a000564. [Epub ahead of print]

Predictive Factors of Vitamin D Inadequacy among Older Adults in the United States.

Lee S, Lee E, Maneno MK, Johnson AA, Wutoh AK.

Optimal serum vitamin D levels are reported to be associated with many health benefits; however, few studies have determined predictive factors using national level data. An assessment of predictive factors for vitamin D inadequacy was conducted using National Health and Nutrition Examination Survey (NHANES) 2001-2006 data. Using the study sample including adults aged 40 years or more, data analysis was performed using the weighted multivariate logistic regression statistical procedure. The prevalence of vitamin D inadequacy (serum vitamin D <20 ng/ml) was 37.3%. Non-Hispanic Blacks were 6.4 times more likely to demonstrate vitamin D inadequacy compared to non-Hispanic Whites (ORadj=6.351; 95% CI 5.338, 7.555; p<0.0001). Also, female gender was a significant predictor of vitamin D inadequacy (ORadj=1.499; 95% CI 1.315, 1.708; p<0.0001) in multivariate models. Subjects who reported not taking vitamin D supplements in the past 30 days were more than twice as likely to be vitamin D inadequate compared with those who had taken dietary supplements containing vitamin D (ORadj=2.225; 95% CI 1.903, 2.601; p<0.0001). In conclusion, the strongest predictor of vitamin D inadequacy was non-Hispanic Black ethnicity. Other potential predictors included smoking, non-use of vitamin D supplements, abnormal BMI, collecting samples in winter, female gender, perception of own health condition as not excellent, lack of health care, and older age. More focused interventions targeting groups of United States residents with vitamin D inadequacy are needed.

Diabetol Metab Syndr. 2019 Feb 14;11:17. doi: 10.1186/s13098-019-0413-2. eCollection 2019.

Multiple poor sleep characteristics and metabolic abnormalities consistent with metabolic syndrome among white, black, and Hispanic/Latina women: modification by menopausal status.

Gaston SA, Park YM, McWhorter KL, Sandler DP, Jackson CL.

Background: Poor sleep is a potential risk factor for metabolic syndrome (MetS), and its relationship with MetS may vary by race/ethnicity and menopausal status among women. Methods: We used Sister Study enrollment data from 2003 to 2009 to investigate the cross-sectional associations between multiple subjective sleep characteristics and having ≥ 3 prevalent metabolic abnormalities consistent with MetS among white, black, and Hispanic/Latina women. Self-reported sleep characteristics included average sleep duration (short [< 7 h] vs. recommended [7-9 h]), sleep debt (≥ 2-h difference between shortest and longest sleep duration, napping ≥ 3 times/week, and insomnia symptoms (difficulty falling or staying asleep). We used Poisson regression with robust variance to estimate adjusted prevalence ratios (PRs) and 95% confidence intervals (CIs) to compare MetS prevalence between women with poor sleep (e.g., short sleep, sleep debt, frequent napping, or insomnia symptoms [all yes vs. no]) and non-poor sleep

within menopausal status categories (premenopausal or postmenopausal). We adjusted for sociodemographic characteristics, mental health, and health behaviors. Results: Among 38,007 eligible women (13,988 premenopausal, 24,019 postmenopausal), mean age was 55 ± 8.8 years, racial/ethnic composition was 86.63% white, 8.53% black, and 4.84% Hispanic/Latina, and 12% had MetS. Associations between certain poor sleep characteristics [i.e., short sleep (PRpremenopausal = 1.23 [95% CI 1.06-1.42], PRpostmenopausal = 1.09 [1.02-1.16], pshort sleep* menopause = 0.0070) and insomnia symptoms (PRpremenopausal = 1.21 [1.05-1.41], PRpostmenopausal = 1.11 [1.05-1.18], pinsomnia symptoms*menopause = 0.035)] and prevalent MetS were stronger among premenopausal compared to postmenopausal women, but did not vary by race/ethnicity. Associations between concurrent short sleep/insomnia symptoms and MetS were stronger among white and Hispanic/Latina postmenopausal women compared to their black counterparts. Menopausal status and race/ethnicity did not modify positive associations for other poor sleep characteristics. Conclusions: Poor sleep was positively associated with MetS prevalence. Associations between individual poor sleep characteristics (i.e., short sleep, insomnia symptoms) were stronger among premenopausal compared to postmenopausal women but did not vary by race/ethnicity.

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Reproductive factors, exogenous hormone use and incidence of melanoma among women in the United States.

Donley GM, Liu WT, Pfeiffer RM, McDonald EC, Peters KO, Tucker MA, Cahoon EK.

BACKGROUND: Although the photosensitising effects of oestrogens may increase the impact of ultraviolet radiation (UVR) on melanoma risk, few prospective studies have comprehensively assessed the association between oestrogen-related factors and melanoma. METHODS: We examined the associations between reproductive factors, exogenous oestrogen use and first primary invasive melanoma among 167 503 non-Hispanic white, postmenopausal women in the NIH-AARP Diet and Health Study. Satellite-based ambient UVR estimates were linked to geocoded residential locations of participants at study baseline. RESULTS: Increased risk of melanoma was associated with early age at menarche (≤10 vs ≥15 years: HR = 1.25, 95% CI: 0.92, 1.71; P for trend = 0.04) and late age at menopause (≥50 vs <45 years: HR = 1.34, 95% CI: 1.13, 1.59; P for trend = 0.001). The relationship between ambient UVR and melanoma risk was highest among women with age at menarche ≤10 years (HR per UVR quartile increase = 1.29; 95% CI: 1.05, 1.58; P-interaction = 0.02). Melanoma risk was not associated with parity, age at first birth, use of oral contraceptives or use of menopausal hormone therapy. CONCLUSIONS: Our findings suggest that increased melanoma risk is associated with early age at menarche and late age at menopause. Effect modification findings support the hypothesis that endogenous oestrogen exposure in childhood increases photocarcinogenicity. Future studies should include information on personal UVR exposure and sun sensitivity.

Nat Rev Endocrinol. 2019 Feb 27. doi: 10.1038/s41574-019-0170-1. [Epub ahead of print]

Combating osteoporosis and obesity with exercise: leveraging cell mechanosensitivity.

Pagnotti GM, Styner M, Uzer G, Patel VS, Wright LE, Ness KK, Guise TA, Rubin J, Rubin CT.

Osteoporosis, a condition of skeletal decline that undermines quality of life, is treated with pharmacological interventions that are associated with poor adherence and adverse effects. Complicating efforts to improve clinical outcomes, the incidence of obesity is increasing, predisposing the population to a range of musculoskeletal complications and metabolic disorders. Pharmacological management of obesity has yet to deliver notable reductions in weight and debilitating complications are rarely avoided. By contrast, exercise shows promise as a non-invasive and non-pharmacological method of regulating both osteoporosis and obesity. The principal components of exercise - mechanical signals - promote bone and muscle anabolism while limiting formation and expansion of fat mass. Mechanical regulation of bone and marrow fat might be achieved by regulating functions of differentiated cells in the skeletal tissue while biasing lineage selection of their common progenitors - mesenchymal stem cells. An inverse relationship between adipocyte versus osteoblast fate selection from stem cells is implicated in clinical conditions such as childhood obesity and increased marrow adiposity in type 2 diabetes mellitus, as well as contributing to skeletal frailty. Understanding how exercise-induced mechanical signals can be used to improve bone quality while decreasing fat mass and metabolic dysfunction should lead to new strategies to treat chronic diseases such as osteoporosis and obesity.

Climacteric. 2019 Feb 27:1-6. doi: 10.1080/13697137.2019.1577378. [Epub ahead of print]

Efficacy of oral estrogen plus testosterone gel to improve sexual function in postmenopausal women.

Chaikittisilpa S, Soimongkol K, Jaisamrarn U.

OBJECTIVE: This study aimed to study the efficacy and safety of estrogen plus low-dose testosterone gel in improving sexual function in postmenopausal women. METHODS: A double-blind, randomized, active-controlled trial was conducted. Seventy postmenopausal women with low sexual function were randomized into two groups. They received weekly 50 mg of transdermal testosterone plus daily oral 1 mg estradiol valerate or only estrogen for 8 weeks. The Female Sexual Function Index (FSFI) score, hematocrit, liver enzymes, lipid profiles, total testosterone, free and bioavailable testosterone, free androgen index, sex hormone binding globulin (SHBG), and endometrial thickness were assessed before and after treatment. RESULTS: After 8 weeks, the FSFI score significantly improved in both groups. However, the change of FSFI score in the testosterone group was significantly higher than in the only estrogen group, 7.2 ± 5.5 and 4.6 ± 3.9, respectively ($p = 0.02$). There were significantly increased serum total testosterone levels, but not the free or bioavailable form, in the testosterone group. There was no significant difference in serum SHBG levels after treatment between both groups. There was no serious adverse effect, only acne was found. CONCLUSION: The addition of low-dose testosterone gel to daily estrogen may improve sexual function in postmenopausal women, but further evaluation and safety data are needed.

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Sex hormone replacement therapy for individuals with Turner syndrome.

Backeljauw P, Klein K.

Turner syndrome is a relatively common genetic condition resulting from absence of all or part of the second sex chromosome. Individuals with Turner syndrome commonly exhibit cardiovascular, endocrine, renal, reproductive, and/or psychosocial abnormalities, among other conditions. Most girls with Turner syndrome have hypergonadotropic hypogonadism and therefore need sex steroid hormonal replacement therapy. The optimal estrogen replacement treatment regimen to induce pubertal development is still being determined. The goals of the estrogen replacement are to mimic the normal physical and social development for timing and progression of puberty. Treatment should begin at 11-12 years of age, with dose increases every 6 months over a 2-3 year period. Initiation with low doses of estrogen is crucial to preserve growth potential. On the other hand, delaying estrogen replacement may be deleterious to bone and uterine health.

Curr Osteoporos Rep. 2019 Feb 26. doi: 10.1007/s11914-019-00504-2. [Epub ahead of print]

Targeting Cell Senescence for the Treatment of Age-Related Bone Loss.

Pignolo RJ, Samsonraj RM, Law SF, Wang H, Chandra A.

PURPOSE OF REVIEW: We review cell senescence in the context of age-related bone loss by broadly discussing aging mechanisms in bone, currently known inducers and markers of senescence, the senescence-associated secretory phenotype (SASP), and the emerging roles of senescence in bone homeostasis and pathology. RECENT FINDINGS: Cellular senescence is a state of irreversible cell cycle arrest induced by insults or stressors including telomere attrition, oxidative stress, DNA damage, oncogene activation, and other intrinsic or extrinsic triggers and there is mounting evidence for the role of senescence in aging bone. Cellular aging also instigates a SASP that exerts detrimental paracrine and likely systemic effects. With aging, multiple cell types in the bone microenvironment become senescent, with osteocytes and myeloid cells as primary contributors to the SASP. Targeting undesired senescent cells may be a favorable strategy to promote bone anabolic and anti-resorptive functions in aging bone, with the possibility of improving bone quality and function with normal aging and/or disease.

Stroke. 2019 Mar;50(3):555-562. doi: 10.1161/STROKEAHA.118.023100.

Artificially Sweetened Beverages and Stroke, Coronary Heart Disease, and All-Cause Mortality in the Women's Health Initiative.

Mossavar-Rahmani Y, Kamensky V, Manson JE, Silver B, Rapp SR, Haring B, Beresford SAA, et al.

Background and Purpose- We examine the association between self-reported consumption of artificially sweetened beverages (ASB) and stroke and its subtypes, coronary heart disease, and all-cause mortality in a cohort of

postmenopausal US women. Methods- The analytic cohort included 81 714 women from the Women's Health Initiative Observational Study, a multicenter longitudinal study of the health of 93 676 postmenopausal women of ages 50 to 79 years at baseline who enrolled in 1993 to 1998. This prospective study had a mean follow-up time of 11.9 years (SD of 5.3 years.) Participants who completed a follow-up visit 3 years after baseline were included in the study. Results- Most participants (64.1%) were infrequent consumers (never or <1/week) of ASB, with only 5.1% consuming ≥2 ASBs/day. In multivariate analyses, those consuming the highest level of ASB compared to never or rarely (<1/wk) had significantly greater likelihood of all end points (except hemorrhagic stroke), after controlling for multiple covariates. Adjusted models indicated that hazard ratios and 95% confidence intervals were 1.23 (1.02-1.47) for all stroke; 1.31 (1.06-1.63) for ischemic stroke; 1.29 (1.11-1.51) for coronary heart disease; and 1.16 (1.07-1.26) for all-cause mortality. In women with no prior history of cardiovascular disease or diabetes mellitus, high consumption of ASB was associated with more than a 2-fold increased risk of small artery occlusion ischemic stroke hazard ratio =2.44 (95% confidence interval, 1.47-4.04.) High consumption of ASBs was associated with significantly increased risk of ischemic stroke in women with body mass index ≥30; hazard ratio =2.03 (95% confidence interval, 1.38-2.98). Conclusions- Higher intake of ASB was associated with increased risk of stroke, particularly small artery occlusion subtype, coronary heart disease, and all-cause mortality. Although requiring replication, these new findings add to the potentially harmful association of consuming high quantities of ASB with these health outcomes.