

Selección de Resúmenes de Menopausia

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Metformin as Anti-Aging Therapy: Is It for Everyone?

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Metformin is the most widely prescribed oral hypoglycemic medication for type 2 diabetes worldwide. Metformin also retards aging in model organisms and reduces the incidence of aging-related diseases such as neurodegenerative disease and cancer in humans. In spite of its widespread use, the mechanisms by which metformin exerts favorable effects on aging remain largely unknown. Further, not all individuals prescribed metformin derive the same benefit and some develop side effects. Before metformin finds its way to mainstay therapy for anti-aging, a more granular understanding of the effects of the drug in humans is needed. This review provides an overview of recent findings from metformin studies in aging and longevity and discusses the use of metformin to combat aging and aging-related diseases. [SE ADJUNTA TEXT COMPLETO.](#)

Am J Med Genet A. 2019 Aug 16. doi: 10.1002/ajmg.a.61310. [Epub ahead of print]

Recognition and management of adults with Turner syndrome: From the transition of adolescence through the senior years.

Lin AE1, Prakash SK2, Andersen NH3, Viuff MH4, Levitsky LL5, Rivera-Davila M6, Crenshaw ML7, et al.

Turner syndrome is recognized now as a syndrome familiar not only to pediatricians and pediatric specialists, medical geneticists, adult endocrinologists, and cardiologists, but also increasingly to primary care providers, internal medicine specialists, obstetricians, and reproductive medicine specialists. In addition, the care of women with Turner syndrome may involve social services, and various educational and neuropsychologic therapies. This article focuses on the recognition and management of Turner syndrome from adolescents in transition, through adulthood, and into another transition as older women. It can be viewed as an interpretation of recent international guidelines, complementary to those recommendations, and in some instances, an update. An attempt was made to provide an international perspective. Finally, the women and families who live with Turner syndrome and who inspired several sections, are themselves part of the broad readership that may benefit from this review. [SE ADJUNTA TEXT COMPLETO.](#)

J Cardiovasc Transl Res. 2019 Aug 15. doi: 10.1007/s12265-019-09907-z. [Epub ahead of print]

Gender Differences in Cardiac Hypertrophy.

Wu J1, Dai F2, Li C2, Zou Y3.

Cardiac hypertrophy is an adaptive response to abnormal physiological and pathological stimuli, which can be classified into concentric and eccentric hypertrophy, induced by pressure overload or volume overload, respectively. In both physiological and pathological scenarios, females generally show a more favorable form of hypertrophy compared with their male counterparts. However once established, cardiac hypertrophy is a stronger risk factor for heart failure in females. Pre-menopausal women are better protected against cardiac hypertrophy compared with men, but this protection is abolished following menopause and is partially restored after estrogen replacement therapy. Estrogen exerts its protection by counteracting pro-hypertrophy signaling pathways, whereas androgen mostly plays an opposite role in cardiac hypertrophy. We here summarize the progress in the understanding of sexual dimorphisms in cardiac hypertrophy and highlight recent breakthroughs in the regulatory role of sex hormones and their intricate molecular networks, in order to shed light on gender-oriented therapeutic efficacy for pathological hypertrophy.

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Secular trends in major osteoporotic fractures among 50+ adults in Denmark between 1995 and 2010.

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We investigated the incidence trend in all major osteoporotic fractures for the whole country of Denmark between 1995 and 2010. Hip and other osteoporotic fractures declined for the general population and especially among women. But, we observed some increasing trend among men which needs more attention. **PURPOSE:** The trend in osteoporotic fractures is varied across the globe, and there is no updated information in the case of Denmark for all major osteoporotic fractures (MOF). Thus, we investigated the incidence rates (IRs) of MOF among 50+ adults in Denmark over the period 1995-2010. **METHODS:** A series of cross-sectional analyses was done using the Danish National Health Service Register. Participants were 50+ adults in the full country Denmark with a MOF between 1995 and 2010. Gender- specific IRs of MOF per 10,000 person years (PYs) were estimated, in addition to IRs of individual fracture sites (hip, vertebrae, humerus, and radius/ulna), and women-to-men IR ratios for MOF. **RESULTS:** A general decline was observed in IRs of MOF for the whole population (from 169.8 per 10,000 PYs in 1995, to 148.0 in 2010), which was more pronounced among women. Thirty-one and nineteen percent of decline was observed in hip fracture rates among women and men, respectively. The trend in clinical vertebral fracture was slightly decreasing for women and increasing for men. The women-to-men rate ratio of MOF decreased noticeably from 2.93 to 2.72 during study period. **CONCLUSIONS:** We observed declining trends in MOF and hip fracture for both sexes. However, a lower rate of decrease of hip fracture and an increasing trend in vertebral fracture was noticed among men. Considering our observations and the major economic burden that accompanies this devastating disease, more attention should be paid to MOF, especially in men.

Int J Reprod Biomed (Yazd). 2019 Jan 28;16(12). pii: ijr.v16i12.3682. doi: 10.18502/ijrm.v16i12.3682.

The effect of hormone replacement therapy on cognitive function in postmenopausal women: An RCT.

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ackground: During the reproductive age, the human brain becomes a target for gonadal steroid hormones. Estrogens influence neural function through effects on neurons and affects indirectly the oxidative stress, inflammation, the cerebral vascular and the immune system. **Objective:** To evaluate the effect of the traditional hormone replacement therapy (HRT) on the cognitive function in postmenopausal women. **Materials and Methods:** In this randomized clinical trial, 140 postmenopausal women, from November 2014 to February 2015, were included. Women were randomly divided into two groups. Each woman in the case group took traditional HRT (0.625mg conjugated equine estrogens+2.5mg medroxyprogesterone acetate daily) plus one Cal+D tablet (500 mg calcium+200 IU vitamin D) daily for four months. Women in the control group received only one Cal+D tablet (500 mg calcium+200 IU vitamin D) daily for four months period. The Montreal Cognitive Assessment (MoCA) and Green Climacteric Scale (GCS) questionnaires filled out after the intervention and compared between the two groups. **Results:** The mean points of the MoCA after the intervention indicate that all MoCA domains except for the orientation improved in the case group. There was a significant difference in the memory domain after the treatment between the two groups. MoCA domains and GCS were negatively correlated after the intervention ($r=-0.235, p=0.006$). **Conclusion:** The HRT has affected some of the MoCA factors. The effects of HRT on cognitive function should be studied in a large prospective study in a group of women in their early and late menopausal ages with periodic assessment of their cognitive function during these follow-up years.

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Hormonal Replacement Therapy in Menopausal Women with History of Endometriosis: A Review of Literature.

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Hormonal replacement therapy (HRT) is effective in treating the symptoms of menopause. Endometriosis is defined as the presence of functional endometrial tissue outside the uterine cavity with a tendency towards invasion and infiltration. Being an estrogen-dependent disease, it tends to regress after menopause. Nevertheless, it affects up to 2.2% of postmenopausal women. Conclusive data are not available in the literature on the appropriateness of HRT in women with endometriosis or a past history of the disease. The hypothesis that exogenous estrogen stimulation could reactivate endometriotic foci has been proposed. The aim of this state-of-the-art review was to revise the current literature about endometriosis in perimenopause and menopause and to investigate the possible role of HRT in this setting of patients. An electronic databases search (MEDLINE, Scopus, ClinicalTrials.gov, EMBASE, Sciencedirect, the Cochrane Library at the CENTRAL Register of Controlled Trials, Scielo) was performed, with the date range of

from each database's inception until May 2019. All of the studies evaluating the impact of different HRT regimens in patients with a history of endometriosis were selected. 45 articles were found: one Cochrane systematic review, one systematic review, five narrative reviews, two clinical trials, two retrospective cohort studies, 34 case reports and case series. Some authors reported an increased risk of malignant transformation of endometriomas after menopause in patients assuming HRT with unopposed estrogen. Low-quality evidence suggests that HRT can be prescribed to symptomatic women with a history of endometriosis, especially in young patients with premature menopause. Continuous or cyclic combined preparations or tibolone are the best choices. HRT improves quality of life in symptomatic post-menopausal women, who should not be denied the replacement therapy only due to their history of endometriosis. Based on low-grade literature evidence, we recommend to prescribe combined HRT schemes; tibolone could be considered.

Medicina (Kaunas). 2019 Aug 11;55(8). pii: E466. doi: 10.3390/medicina55080466.

High Physical Activity Level May Reduce Menopausal Symptoms.

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Background and Objectives: Menopause is a normal physiological change occurring at a woman's mid-life. During this time, women experience vasomotor, physical and physiological problems, which reduce their quality of life. Many women are searching for different, alternative methods to reduce the severity of menopausal symptoms. Physical activity (PA) is one of the recommended methods to reduce menopausal symptoms. The purpose of this study was to investigate the association between specific domains (physical activity during leisure time, at work, during transportation and household activities) and the menopausal symptoms. **Materials and Methods:** We included 305 women aged 40-65 in the study. All participants were divided into three groups according to menopausal status. The research tools used were the International Physical Activity Questionnaire (IPAQ) to assess physical activity level in four domains and the Menopause Rating Scale (MRS) to assess the severity of menopausal symptoms. The data analysis was performed by Chi-square test and analysis of variance (ANOVA) with post hoc Tuckey test. **Results:** Menopausal stage was significantly associated with the total MRS score ($p < 0.001$) and specifically the urogenital and somato-vegetative subscores ($p < 0.001$). Physical activity was significantly associated ($p < 0.001$) with leisure time (according to IPAQ domains). Most postmenopausal women had high PA level (59.66%). Significantly less women with high PA levels had severe urogenital symptoms: 10.82% of participant with a low PA level, 11.15% with a moderate PA level and 4.26% with a high PA level ($p = 0.046$). **Conclusions:** Physical activity during leisure time is associated to menopausal symptoms in Polish women. Women with high and moderate PA levels have less severe menopausal symptoms compared to inactive women. Middle-aged women with low PA levels at work suffer from more severe somato-vegetative symptoms.

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Reduced Bone Loss Is Associated With Reduced Mortality Risk in Subjects Exposed to Nitrogen Bisphosphonates: A Mediation Analysis.

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Bisphosphonates, potent antiresorptive agents, have been found to be associated with mortality reduction. Accelerated bone loss is, in itself, an independent predictor of mortality risk, but the relationship between bisphosphonates, bone loss, and mortality is unknown. This study aimed to determine whether the association between bisphosphonates and mortality is mediated by a reduction in the rate of bone loss. Participants from the population-based Canadian Multicentre Osteoporosis Study were followed prospectively between 1996 and 2011. Comorbidities and lifestyle factors were collected at baseline and bone mineral density (BMD) at baseline and at years 3 (for those aged 40 to 60 years), 5, and 10. Rate of bone loss was calculated using linear regression. Information on medication use was obtained yearly. Bisphosphonate users grouped into nitrogen bisphosphonates (nBP; alendronate or risedronate) and etidronate and non-users (NoRx) were matched by propensity score, including all baseline factors as well as time of treatment. Cox's proportional hazards models, unadjusted and adjusted for annual rate of bone loss, were used to determine the association between nBP and etidronate versus NoRx. For the treatment groups with significant mortality risk reduction, the percent of mortality reduction mediated by a reduction in the rate of bone loss was estimated using a causal mediation analysis. There were 271 pairs of nBP and matched NoRx and 327 pairs of etidronate and matched NoRx. nBP but not etidronate use was associated with significant mortality risk reduction (hazard ratios [HR] = 0.61 [95% confidence interval 0.39-0.96] and 1.35 [95% CI 0.86-2.11] for nBP and etidronate, respectively). Rapid bone loss was associated with more than 2-fold increased mortality risk compared with no loss. Mediation analysis indicated

that 39% (95% CI 7%-84%) of the nBP association with mortality was related to a reduction in the rate of bone loss. This finding provides an insight into the mechanism of the relationship between nBP and survival benefit in osteoporotic patients.