Selección de Resúmenes de Menopausia

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María Soledad Vallejo. Clínica Quilín. Universidad de Chile

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Bilateral Oophorectomy and Rate of Colorectal Cancer: A Prospective Cohort Study

Trine Koch 1 2 , Jeanette Therming Jørgensen 3 , Jane Christensen 4 , Anne Katrine Duun-Henriksen 4 , et al

Worldwide, colorectal cancer is the second most common cancer and third cause of cancer death in women. Estrogen exposure has been inversely associated with colorectal cancer. Oophorectomy reduces circulating estrogen, but the effect on colorectal cancer remains uncertain. The aim of this study was to examine the association between unilateral and bilateral oophorectomy and subsequent risk of colorectal cancer, and whether this association varied by menopausal status at time of oophorectomy, use of hormone replacement therapy (HRT) at baseline, hysterectomy and baseline body mass index (BMI). The study included 25 698 female nurses (aged ≥45 years) participating in the Danish Nurse Cohort. Nurses were followed from baseline until date of colorectal cancer, death, emigration or end of follow-up at 31st December 2018, whichever came first. We examined the association between oophorectomy and colorectal cancer (all ages and stratified by menopausal status). The potential modifying effects of hysterectomy, HRT use at baseline and BMI were investigated. During 542 140 person-years of follow-up, 863 (3.4%) nurses were diagnosed with colorectal cancer. Bilateral oophorectomy was associated with a 79% increased colorectal cancer rate, adjusted rate ratio (aRR) (95% confidence interval, CI): 1.79 (1.33; 2.42). Effect estimates following unilateral oophorectomy also showed higher rate of colorectal cancer, although less pronounced and non-statistically significant (aRR) (95% CI): 1.25 (0.86;1.82). Similar results were seen when stratifying by menopausal status. The association was not modified by baseline HRT use, hysterectomy or BMI. Oophorectomy was associated with increased rate of colorectal cancer, with highest rates among women with bilateral oophorectomy.

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Sex steroid hormones are associated with mortality in COVID patients: Level of sex hormones in severe COVID-19

Ingeborg E van Zeggeren 1 , Anita Boelen 2 , Diederik van de Beek 1 , Annemieke C Heijboer 2 3 , et al.

In patients with coronavirus disease 2019 (COVID-19), men are more severely affected than women. Multiple studies suggest that androgens might play a role in this difference in disease severity. Our objective was to assess the association between sex hormone levels and mortality in patients with severe COVID-19.We selected patients from the Amsterdam University Medical Centers COVID-19 Biobank, in which patients admitted to hospital in March and April 2020, with reverse transcription-polymerase chain reaction proven severe acute respiratory syndrome-coronavirus-2 infection, were prospectively included. Specifically, we included postmenopausal women (>55 years) and age-matched men, with a mortality of 50% in each group. Residual plasma samples were used to measure testosterone, estradiol, sex hormone binding globulin (SHBG), and albumin. We investigated the association of the levels of these hormones with mortality in men and women.We included 16 women and 24 men in March and April 2020 of whom 7 (44%) and 13 (54%), respectively, died. Median age was 69 years (interquartile range [IQR] 64-75). In men, both total and free testosterone was significantly lower in deceased patients (median testosterone 0.8 nmol/L [IQR 0.4-1.9] in deceased patients vs 3.2 nmol/L [IQR 2.1-7.5] in survivors; P < .001, and median free testosterone 33.2 pmol/L [IQR 15.3-52.2] in deceased patients vs 90.3 pmol/L [IQR 49.1-209.7] in survivors; P = .002). SHBG levels were significantly lower in both men and women who died (18.5 nmol/L [IQR 11.3-24.3] in deceased patients vs 34.0 nmol/L [IQR 25.0-48.0] in survivors; P < .001). No difference in estradiol levels was found between deceased and surviving patients. Low SHBG levels were associated with mortality rate in patients with COVID-19, and low total and free testosterone levels were associated with mortality in men. The role of testosterone and SHBG and potential of hormone replacement therapy needs further exploration in COVID-19.

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Hyperprolactinemia after menopause: Diagnosis and management

Renata S Auriemma 1 , Rosa Pirchio 1 , Rosario Pivonello 2 , Annamaria Colao 3

Most prolactinomas are diagnosed in women of reproductive age and are generally microadenomas. Prolactinomas diagnosed in postmenopausal women are less common and are not usually associated with the typical syndrome induced by prolactin excess, including infertility and oligo-amenorrhea. This implies that the diagnosis of prolactinomas after menopause may be delayed and require greater clinical effort. Limited data are available on the management and prognosis of prolactinomas in postmenopausal women. However, the physiologic decline of prolactin levels during menopause and the lack of fertility concerns, which represent specific indications for medical treatment with dopamine agonists, might require a careful reassessment of therapeutic management in such patients. Postmenopausal women with microprolactinoma may be successfully withdrawn from medical therapy with dopamine agonists, whereas in those with macroprolactinomas greater caution is advisable before dopamine agonists are discontinued, considering the potential, although rare, tumor enlargement. This review focuses on the diagnostic challenges and therapeutic management of prolactinomas in postmenopausal women.

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Cross-Talks between the Cardiovascular Disease-Sarcopenia-Osteoporosis Triad and Magnesium in Humans

Marie-Eva Pickering 1

Magnesium (Mg) is a pivotal and very complex component of healthy aging in the cardiovascular-muscle-bone triad. Low Mg levels and low Mg intake are common in the general aging population and are associated with poorer outcomes than higher levels, including vascular calcification, endothelial dysfunction, osteoporosis, or muscle dysfunction/sarcopenia. While Mg supplementation appears to reverse these processes and benefit the triad, more randomized clinical trials are needed. These will allow improvement of preventive and curative strategies and propose guidelines regarding the pharmaceutical forms and the dosages and durations of treatment in order to optimize and adapt Mg prescription for healthy aging and for older vulnerable persons with comorbidities.

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From Menopause to Neurodegeneration-Molecular Basis and Potential Therapy

Yu-Jung Cheng 1 2 , Chieh-Hsin Lin 3 4 5 6 , Hsien-Yuan Lane 3 4 7 8

The impacts of menopause on neurodegenerative diseases, especially the changes in steroid hormones, have been well described in cell models, animal models, and humans. However, the therapeutic effects of hormone replacement therapy on postmenopausal women with neurodegenerative diseases remain controversial. The steroid hormones, steroid hormone receptors, and downstream signal pathways in the brain change with aging and contribute to disease progression. Estrogen and progesterone are two steroid hormones which decline in circulation and the brain during menopause. Insulin-like growth factor 1 (IGF-1), which plays an import role in neuroprotection, is rapidly decreased in serum after menopause. Here, we summarize the actions of estrogen, progesterone, and IGF-1 and their signaling pathways in the brain. Since the incidence of Alzheimer's disease (AD) is higher in women than in men, the associations of steroid hormone changes and AD are emphasized. The signaling pathways and cellular mechanisms for how steroid hormones and IGF-1 provide neuroprotection are also addressed. Finally, the molecular mechanisms of potential estrogen modulation on N-methyl-d-aspartic acid receptors (NMDARs) are also addressed. We provide the viewpoint of why hormone therapy has inconclusive results based on signaling pathways considering their complex response to aging and hormone treatments. Nonetheless, while diagnosable AD may not be treatable by hormone therapy, its preceding stage of mild cognitive impairment may very well be treatable by hormone therapy.

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Long-term persistence with denosumab: real-world data from the Austrian Osteoporosis Clinic (AOC). A retrospective data analysis

Ewald Boschitsch 1 2 , Oliver Naegele 3 , Anita Klinger 4 3 , Harald Brix-Samoylenko 4

In short-term studies, persistence with denosumab has been higher than with other osteoporosis drugs. This study shows that persistence can be maintained in the long-term and is associated with efficacy and safety parameters.
Purpose: To assess long-term persistence with denosumab in postmenopausal women with osteoporosis. Secondary purposes were the evaluation of changes in efficacy and tolerance/safety parameters over time. Methods: Persistence was determined by number and rate of patients receiving denosumab on time in 6-month intervals (+ / - 8 weeks). The total population was stratified by internal patients (injections and monitoring at the Austrian Osteoporosis Clinic [AOC], 74%) and external patients (injections at the practitioner's office with occasional monitoring at the AOC, 26%). In internal patients, efficacy parameters including bone mineral density (BMD) and the bone marker CTX were assessed at fixed time points and tolerance/safety parameters including side effects (SEs), adverse events (AEs), and serious AEs (SAEs) evaluated. Results: Of 851 patients, 71% (73% internal and 64% external) were persistent at 7.5 years of follow-up. The mean rate of cumulative persistence in internal patients decreased from 94% at the time of the second dose to 73% at the time of the fifteenth dose. BMD increased and CTX decreased, overall and in pairwise comparisons (all $p < .001$). AEs and SAEs, but not SEs, were lower in persistent than non-persistent patients. Conclusions: This is the first study showing that long-term (> 3 years) real-world persistence with denosumab could be maintained at a high level (> 70%) in most patients. Denosumab was well tolerated and associated with decreased CTX levels and increased BMD.

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The role of estrogens in osteosarcopenia: from biology to potential dual therapeutic effects

A Mandelli 1 , E Tacconi 2 , I Levinger 1 3 4 , G Duque 1 3 4 , A Hayes 1 3 4

Osteoporosis and sarcopenia are two conditions associated with aging and characterized by a simultaneous decline in bone and muscle mass, respectively. These conditions share common risk factors (genetic, endocrine, nutritional and lifestyle factors) and biological pathways that often co-exist in a syndrome known as osteosarcopenia. Among the endocrine causes, estrogens play a critical role, especially in women. Estrogens have been demonstrated to exert a positive effect on bone and muscle development and maintenance. For this reason, menopause is characterized by a loss in bone mineral density and skeletal muscle quality and quantity. To date, studies indicate a positive effect of hormonal therapy on the prevention and management of osteoporosis, to the point that estrogen is prescribed as a first-line treatment for osteoporosis by the major international authorities. While results on sarcopenia are still disputable, such that estrogens are not recommended to prevent muscle loss in postmenopausal women, increased response to anabolic stimuli with estrogen therapy suggests similar beneficial effects on muscle as seen with bone, particularly when combined with resistance exercise.