Selección de Resúmenes de Menopausia

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Laser Therapy for Genitourinary Syndrome of Menopause.

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PURPOSE OF REVIEW: The purpose of this article is to review the available data regarding the application and therapeutic outcomes of laser therapy for the treatment of genitourinary syndrome of menopause (GSM). RECENT FINDINGS: There have been several studies regarding the use of laser therapy for the treatment of GSM. Most of these studies show a trend toward safe and effective treatment in the short term (less than or equal to 12 weeks). However, these studies are lacking in randomization, blinding, placebo, and comparison groups. Although laser therapy for the treatment of the symptoms of GSM appears promising, there is currently a lack of high-level and long-term evidence regarding its safety and efficacy. There is also a lack of professional guidelines in the USA regarding this modality of treatment, specifically for GSM. Opportunities exist for future research in this area, specifically to determine safety and long-term outcomes of therapy.

Nutrients. 2018 Aug 16;10(8). pii: E1103. doi: 10.3390/nu10081103.

Muscle and Bone Health in Postmenopausal Women: Role of Protein and Vitamin D Supplementation Combined with Exercise Training.

Agostini D, Zeppa SD, Lucertini F, Annibalini G, Gervasi M, Marini CF, Piccoli G, Stocchi V, Barbieri E, Sestili P.

Menopause is an age-dependent physiological condition associated with a natural decline in oestrogen levels, which causes a progressive decrease of muscle mass and strength and bone density. Sarcopenia and osteoporosis often coexist in elderly people, with a prevalence of the latter in elderly women. The profound interaction between muscle and bone induces a negative resonance between the two tissues affected by these disorders worsening the quality of life in the postmenopausal period. It has been estimated that at least 1 in 3 women over age 50 will experience osteoporotic fractures, often requiring hospitalisation and long-term care, causing a large financial burden to health insurance systems. Hormonal replacement therapy is effective in osteoporosis prevention, but concerns have been raised with regard to its safety. On the whole, the increase in life expectancy for postmenopausal women along with the need to improve their quality of life makes it necessary to develop specific and safe therapeutic strategies, alternative to hormonal replacement therapy, targeting both sarcopenia and osteoporosis progression. This review will examine the rationale and the effects of dietary protein, vitamin D and calcium supplementation combined with a specifically-designed exercise training prescription as a strategy to counteract these postmenopausal-associated disorders.

J Clin Ultrasound. 2018 Aug 16. doi: 10.1002/jcu.22631. [Epub ahead of print]

Risk of endometrial cancer and endometrial hyperplasia with atypia in asymptomatic postmenopausal women with endometrial thickness ≥11 mm: A systematic review and meta-analysis.

Alcázar JL, Bonilla L, Marucco J, Padilla AI, Chacón E, Manzour N, Salas A.

PURPOSE: To evaluate the risk of endometrial cancer and/or endometrial hyperplasia with atypia in asymptomatic postmenopausal women with endometrial thickness ≥ 11 mm. METHODS: Systematic review of literature using database search (PubMed and Web of Science) of articles published between January 1990 and December 2016 evaluating the correlation between endometrial thickness as measured by transvaginal ultrasound (double layer) and histopathological findings in asymptomatic postmenopausal women, using the following terms: "endometrial thickness," "postmenopausal," "postmenopause," and "asymptomatic." Inclusion criteria were prospective or retrospective studies of more than 150 cases that provided information on endometrial thickness and its correlation with histopathological data. Studies that included patients with hormone replacement therapy, tamoxifen, or aromatase inhibitors were excluded. The overall relative risk (RR) for EC/EHA was calculated, stratifying the patients into two groups according to endometrial thickness (<11 mm and ≥11 mm). Heterogeneity was assessed by

calculating I2. RESULTS: The search identified 289 studies. After exclusions, nine articles that met all the inclusion criteria were included, comprising data from 4751 women. The prevalence of endometrial cancer and/or endometrial hyperplasia with atypia was 2.4%. The relative risk of endometrial cancer and/or endometrial hyperplasia with atypia in the ≥11 mm group was 2.59 (95% CI: 1.66-4.05). High heterogeneity was observed between studies (I2: 57.3%, P = .016). CONCLUSIONS: Overall the risk for EC/EHA was 2.6 times greater in women with ET ≥11 mm vs women with ET 5-10 mm, although there was significant heterogeneity in estimates across studies.

Biomed Res Int. 2018 Jul 12;2018:4783710. doi: 10.1155/2018/4783710. eCollection 2018.

Abdominal Adiposity and Physical Inactivity Are Positively Associated with Breast Cancer: A Case-Control Study.

Godinho-Mota JCM, Gonçalves LV, Soares LR, Mota JF, Martins KA, Freitas-Junior I, Freitas-Junior R.

Objective: To examine whether breast cancer is associated with body composition and level of physical activity, considering the menstrual status. Methods: This was a case-control study with 116 women recently diagnosed with breast cancer and 226 controls. Body composition was assessed by dual-energy X-ray absorptiometry, and cardiometabolic risk was assessed by conicity index and waist-to-height ratio. The short version of the International Physical Activity Questionnaire was used to estimate the level of physical activity. All analyses were adjusted for age and BMI. Results: The total body fat percentage, android body fat, android-gynoid ratio, and waist circumference were positively associated ($p < 0.05$), whereas the percentage of lean body mass ($p < 0.05$) and the level of physical activity ($p < 0.01$) were inversely associated with breast cancer in premenopausal women. Among postmenopausal women, physical activity decreased the chance of developing breast cancer by 49% (95% CI = 0.29 to 0.92, $p = 0.02$). Conclusion: A low percentage of lean body mass and high abdominal adiposity in the premenopausal period increase the chances of developing breast cancer. Regular physical activity is inversely associated with breast cancer in pre- and postmenopausal women.

Cancer Epidemiol Biomarkers Prev. 2018 Aug 14. pii: cebp.0900.2017. [Epub ahead of print]

Effects of exercise and cardiorespiratory fitness on estrogen metabolism in postmenopausal women.

Matthews CE, Sampson JN, Brenner DR, Moore SC, Courneya KS, Ziegler RG, Friedenreich CM.

BACKGROUND: Lowering endogenous estrogen levels is one mechanism whereby physical activity may lower postmenopausal breast cancer risk. Several prospective studies have suggested that increased 2-hydroxylation of estrogens may also reduce postmenopausal breast cancer risk, but whether or not exercise alters estrogen metabolism through this mechanism is unclear. METHODS: We measured total circulating concentrations of parent estrogens (estrone, estradiol) and 13 estrogen metabolites, including glucuronidated, sulfated, and unconjugated forms, by stable isotope dilution liquid chromatography-tandem mass spectrometry (LC-MS/MS) in 153 postmenopausal women randomized to 12-months of moderate-vigorous exercise and 153 controls. We also explored associations with cardiorespiratory fitness measured by treadmill. RESULTS: Although women randomized to exercise averaged 178 minutes/week of exercise over 12-months, their cardiorespiratory fitness was 13% greater than controls at 12-months ($p=0.0001$), and total estradiol was reduced by 10% ($p=0.04$), there were no statistically significant effects of exercise on circulating concentrations of estrogen metabolites in the 2-, 4-, or 16-pathways, or on the 2-pathway/parent estrogens ratio. However, we observed a statistically significant association between increased fitness and reduced concentration of 2-pathway metabolites ($p < 0.05$). CONCLUSIONS: We found no evidence that 12-months of moderate-vigorous exercise or increased fitness changed estrogen metabolism in a way that might reduce breast cancer risk. IMPACT: The protective effect of exercise on postmenopausal breast cancer is unlikely to be mediated by changes in estrogen metabolism.

BJOG. 2018 Aug 14. doi: 10.1111/1471-0528.15433. [Epub ahead of print]

Pattern of mortality after menopausal hormone therapy: long-term follow-up in a population based cohort.

Holm M, Olsen A, Au Yeung SL, Overvad K, Lidegaard Ø, Kroman N, Tjønneland A.

OBJECTIVE: To investigate long-term pattern of mortality in menopausal women according to different modalities of hormone therapy. DESIGN: Population based prospective cohort study. SETTING: Denmark 1993-2013.

POPULATION: 29,243 women aged 50-64 years at entry into the Diet, Cancer, and Health Cohort, enrolled 1993-1997 and followed through December 31, 2013. METHODS: Cox' proportional hazards models for increasingly longer periods of follow up time were used to estimate mortality pattern according to baseline hormone use adjusted for relevant potential confounders. MAIN OUTCOME: All cause and cause specific mortality. Outcome information was obtained from the Danish Causes of Death Registry (linkage 99.6%). RESULTS: 4,098 women died during a median follow-up of 17.6 years. After adjustment for relevant lifestyle risk factors, hormone use had no impact on all-cause mortality, regardless of modality. Among baseline users lower CVD mortality was only evident after 5 years (HR 0.54; 95% CI: 0.32-0.92), but dissipated with additional follow-up. Reversely, lower colorectal cancer mortality (HR 0.64; 95% CI 0.46-0.89), and higher breast cancer mortality (HR 1.34; 95% CI 1.05-1.72) only became evident after 15 years follow-up. There were no significant associations for mortality from other types of cancer or from stroke. CONCLUSIONS: In this long-term follow-up study, taking hormones during menopause was not associated with overall mortality among middle-aged women. Investigating cause-specific mortality revealed significant albeit weak associations differential according to both causes of death and over time underlining the importance of carefully considering individual risks and duration of treatment when making decisions on hormone therapy.

Eur J Obstet Gynecol Reprod Biol. 2018 Aug 6;229:45-56. [Epub ahead of print]

Efficacy of vaginal therapies alternative to vaginal estrogens on sexual function and orgasm of menopausal women: A systematic review and meta-analysis of randomized controlled trials.

Pitsouni E, Grigoriadis T, Douskos A, Kyriakidou M, Falagas ME, Athanasiou S.

Genitourinary syndrome of menopause (GSM) increases the probability of female sexual dysfunction (FSD). The aim of the current study is to systematically assess data regarding sexual function and use of vaginal therapies, alternative to vaginal estrogens (VE), in menopausal women with GSM. PubMed, Scopus and Cochrane Library were searched (May-September 2017) using combination keywords: "dyspareunia and vaginal therapy", "sexual function and vaginal therapy", "orgasm and vaginal therapy", "vaginal atrophy" and "genitourinary syndrome of menopause". Eligible studies were RCTs focusing on the use of vaginal therapies, alternative to VE, in menopausal women. These studies were written in English language and published in peer-reviewed journals with impact factor. Assessment of risk of bias was performed using the Cochrane Risk of Bias Tool. Outcomes involved dyspareunia, vaginal dryness, orgasm and all parameters of sexual function. Twenty-nine RCTs including 3689 menopausal women, were included. Vaginal therapies, alternative to VE included non-hormonal (vaginal laser, lubricants/moisturizers, phytoestrogens and lidocaine) and hormonal ones (Dehyadroapiandrosterone (DHEA), testosterone and oxytocin). Dyspareunia and/or vaginal dryness were assessed in 72% of the articles, while the FSD and orgasm in 45% and 28% of articles, respectively. Dyspareunia and vaginal dryness improved in all relevant studies. Sexuality scores of lubricants were inferior to estrogens [3 studies, n = 138, standardized mean difference (smd) -0.64, (95%CI -1.1, -0.2)]. Orgasm domain was the same for the DHEA 0.5% and placebo (2 studies, n = 663, smd 1.29 (95% -0.47, 3.05), I2:90%). Sexual satisfaction and sexuality score were the same when testosterone was compared or added to estrogen therapy (2 studies, n = 99, smd 0.16 (95%CI-0.23, 0.56), I2:12% and 2 studies (n = 87), smd 0.20 (95%CI-0.23,0.62), I2:0%, respectively. Available data are not adequate to provide counseling by the physicians in menopausal women regarding the efficacy of vaginal therapies as an alternative to estrogens, on all parameters of sexual function.

Joint Bone Spine. 2018 Aug 8. pii: S1297-319X(18)30189-1 [Epub ahead of print]

Sarcopenia.

Tournadre A, Vial G, Capel F, Soubrier M, Boirie Y.

Sarcopenia is defined as a combination of low muscle mass with low muscle function. The term was first used to designate the loss of muscle mass and performance associated with aging. Now, recognized causes of sarcopenia also include chronic disease, a physically inactive lifestyle, loss of mobility, and malnutrition. Sarcopenia should be differentiated from cachexia, which is characterized not only by low muscle mass but also by weight loss and anorexia. Sarcopenia results from complex and interdependent pathophysiological mechanisms that include aging, physical inactivity, neuromuscular compromise, resistance to postprandial anabolism, insulin resistance, lipotoxicity, endocrine factors, oxidative stress, mitochondrial dysfunction, and inflammation. The prevalence of sarcopenia

ranges from 3% to 24% depending on the diagnostic criteria used and increases with age. Among patients with rheumatoid arthritis 20% to 30% have sarcopenia, which correlates with disease severity. Sarcopenia exacts a heavy toll of functional impairment, metabolic disorders, morbidity, mortality, and healthcare costs. Thus, the consequences of sarcopenia include disability, quality-of-life impairments, falls, osteoporosis, dyslipidemia, an increased cardiovascular risk, metabolic syndrome, and immunosuppression. The adverse effects of sarcopenia are particularly great in patients with a high fat mass, a condition known as sarcopenic obesity. The diagnosis of sarcopenia rests on muscle mass measurements and on functional tests that evaluate either muscle strength or physical performance (walking, balance). No specific biomarkers have been identified to date. The management of sarcopenia requires a multimodal approach combining a sufficient intake of high-quality protein and fatty acids, physical exercise, and antiinflammatory medications. Selective androgen receptor modulators and anti-myostatin antibodies are being evaluated as potential stimulators of muscle anabolism.

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mTORC Inhibitors as Broad-Spectrum Therapeutics for Age-Related Diseases.

Walters HE, Cox LS.

Chronological age represents the greatest risk factor for many life-threatening diseases, including neurodegeneration, cancer, and cardiovascular disease; ageing also increases susceptibility to infectious disease. Current efforts to tackle individual diseases may have little impact on the overall healthspan of older individuals, who would still be vulnerable to other age-related pathologies. However, recent progress in ageing research has highlighted the accumulation of senescent cells with chronological age as a probable underlying cause of pathological ageing. Cellular senescence is an essentially irreversible proliferation arrest mechanism that has important roles in development, wound healing, and preventing cancer, but it may limit tissue function and cause widespread inflammation with age. The serine/threonine kinase mTOR (mechanistic target of rapamycin) is a regulatory nexus that is heavily implicated in both ageing and senescence. Excitingly, a growing body of research has highlighted rapamycin and other mTOR inhibitors as promising treatments for a broad spectrum of age-related pathologies, including neurodegeneration, cancer, immunosenescence, osteoporosis, rheumatoid arthritis, age-related blindness, diabetic nephropathy, muscular dystrophy, and cardiovascular disease. In this review, we assess the use of mTOR inhibitors to treat age-related pathologies, discuss possible molecular mechanisms of action where evidence is available, and consider strategies to minimize undesirable side effects. We also emphasize the urgent need for reliable, non-invasive biomarkers of senescence and biological ageing to better monitor the efficacy of any healthy ageing therapy.