Selección de Resúmenes de Menopausia

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María Soledad Vallejo. Clínica Quilín. Universidad de Chile

The Efficacy of Strength Exercises for Reducing the Symptoms of Menopause: A Systematic Review

Ana María Capel-Alcaraz 1, Héctor García-López 1, Adelaida María Castro-Sánchez 1, et al.

Background: The aim of this systematic review was to determine whether strength exercises improve the symptoms of menopause and to provide an update on the most recent scientific evidence on the type and regimen of exercise that help reduce the symptoms. Methods: An electronic search of scientific databases was performed from 2015 to 2022. Randomized clinical trials that analyzed the effects of strength exercises versus other types of interventions, considering all the outcome measures of interest, were included in this review. Results: We found 5964 potential articles. After applying the selection criteria, we selected 12 of the articles. The studies compared strength exercises versus other therapies or compared strength exercises versus no intervention in one of the groups. The results showed improvements in the strength of the legs and pelvic floor, physical activity, bone density, metabolic and hormonal changes, heart rate and blood pressure and a change in hot flashes. Conclusions: There is evidence that strength exercises can be beneficial for improving strength, physical activity, bone density and hormonal and metabolic levels. In terms of the appropriate type of strength training, the evidence is still unclear given that the same benefits are achieved by various types of exercises.

Estradiol and Estrone Have Different Biological Functions to Induce NF-κB-Driven Inflammation, EMT and Stemness in ER+ Cancer Cells

Ana Belén Diaz-Ruano 1, Nuria Martinez-Alarcon 1, Macarena Perán 1 2 3 4, Karim Benabdellah 5, et al.

In general, the risk of being diagnosed with cancer increases with age; however, the development of estrogen-receptor-positive (ER+) cancer types in women are more closely related to menopausal status than age. In fact, the general risk factors for cancer development, such as obesity-induced inflammation, show differences in their association with ER+ cancer risk in pre- and postmenopausal women. Here, we tested the role of the principal estrogens in the bloodstream before and after menopause, estradiol (E2) and estrone (E1), respectively, on inflammation, epithelial-to-mesenchymal transition (EMT) and cancer stem cell enrichment in the human ER+ cervical cancer cell line HeLa. Our results demonstrate that E1, contrary to E2, is pro-inflammatory, increases embryonic stem-transcription factors (ES-TFs) expression and induces EMT in ER+ HeLa cells. Moreover, we observed that high intratumoural expression levels of 17β-Hydroxysteroid dehydrogenase (HSD17B) isoforms involved in E1 synthesis is a poor prognosis factor, while overexpression of E2-synthetizing HSD17B isoforms is associated with a better outcome, for patients diagnosed with ER+ ovarian and uterine corpus carcinomas. This work demonstrates that E1 and E2 have different biological functions in ER+ gynaecologic cancers. These results open a new line of research in the study of ER+ cancer subtypes, highlighting the potential key oncogenic role of E1 and HSD17B E1-synthesizing enzymes in the development and progression of these diseases.

Obesity and Cancer: A Current Overview of Epidemiology, Pathogenesis, Outcomes, and Management

Sukanya Pati 1, Wadeed Irfan 2, Ahmad Jameel 1, Shahid Ahmed 1 3, Rabia K Shahid 1

Background: Obesity or excess body fat is a major global health challenge that has not only been associated with diabetes mellitus and cardiovascular disease but is also a major risk factor for the development of and mortality related to a subgroup of cancer. This review focuses on epidemiology, the relationship between obesity and the risk associated with the development and recurrence of cancer and the management of obesity. Methods: A literature search using PubMed and Google Scholar was performed and the keywords 'obesity' and cancer' were used. The search was limited to research papers published in English prior to September 2022 and focused on studies that investigated epidemiology, the pathogenesis of cancer, cancer incidence and the risk of recurrence, and the management of obesity. Results: About 4-8% of all cancers are attributed to obesity. Obesity is a risk factor for several major cancers, including post-menopausal breast, colorectal,

endometrial, kidney, esophageal, pancreatic, liver, and gallbladder cancer. Excess body fat results in an approximately 17% increased risk of cancer-specific mortality. The relationship between obesity and the risk associated with the development of cancer and its recurrence is not fully understood and involves altered fatty acid metabolism, extracellular matrix remodeling, the secretion of adipokines and anabolic and sex hormones, immune dysregulation, and chronic inflammation. Obesity may also increase treatment-related adverse effects and influence treatment decisions regarding specific types of cancer therapy. Structured exercise in combination with dietary support and behavior therapy are effective interventions. Treatment with glucagon-like peptide-1 analogues and bariatric surgery result in more rapid weight loss and can be considered in selected cancer survivors. Conclusions: Obesity increases cancer risk and mortality. Weight-reducing strategies in obesity-associated cancers are important interventions as a key component of cancer care. Future studies are warranted to further elucidate the complex relationship between obesity and cancer with the identification of targets for effective interventions.

Impact of Hormone Replacement Therapy on the Overall Survival and Progression Free Survival of Ovarian Cancer Patients: A Systematic Review and Meta-Analysis

Patriciu Andrei Achimaș-Cadariu 1 2, Diana Loreta Păun 3, Andrei Pașca 1 2

Background: Frequently, patients treated for Ovarian Cancer (OC) undergo menopause with subsequent symptoms. This review scrutinised the impact of Hormone Replacement Therapy (HRT) on the Overall Survival (OS) and Progression-Free Survival (PFS) of patients diagnosed with OC. Methods: A systematic literature search was conducted in the most popular English databases. Inclusion and exclusion criteria were applied to select publications that evaluate OS and PFS in these patients. End-point analysis targeted values of log(HR) and its Standard Error (SE). Results: Up to 1 September 2022, 11 studies were included in the qualitative synthesis. Eight publications, totalling 4191 patients, were included in the meta-analyses. Eight studies were considered for the OS analysis and pooled an HR of 0.66 with respective 95% CI between 0.57 and 0.76, with a p-value < 0.00001 at a Z value of 5.7, in favour of the HRT group. Results for PFS showed an overall HR of 0.73 in favour of the HRT group; CI between 0.57 and 0.95, p = 0.02 at a Z value of 2.36. Further subgroup analyses highlighted the non-inferiority of this treatment. Conclusions: Patients treated for OC that receive HRT for menopausal symptoms after various treatments appeared to have better OS than never-users.

Endogenous dehydroepiandrosterone and depression in postmenopausal women: a systematic review of observational studies

Chandima Hemachandra, Susan R Davis, Robin J Bell 1, Farhana Sultana, Rakibul M Islam 1

Importance: The associations between endogenous dehydroepiandrosterone (DHEA) and DHEA sulfate (DHEAS), and depression in older women are uncertain. However, DHEA supplements are widely available over the counter in some countries, and some people may be taking DHEA with the hope of positive mood effects. Objective: This systematic review aimed to investigate the association between endogenous DHEA/DHEAS blood concentrations and depression/depressive symptoms in community-dwelling postmenopausal women. Evidence review: Searches were conducted in Ovid MEDLINE, EMBASE, PsycINFO, and Web of Science databases for observational studies with at least 100 community-dwelling participants until March 9, 2022. The bibliographies of retrieved articles were manually searched. The studies published in English and meeting the inclusion criteria were included in the review. The risk of bias was assessed with the modified Hoy tool for cross-sectional designs and the Joanna Briggs Institute modified critical appraisal checklist for cohort studies. Findings: Of the 30 articles retrieved for full-text review, 14 met the criteria for inclusion. Seven studies were cross-sectional, six were longitudinal, and one had both cross-sectional and longitudinal data. Five of eight cross-sectional studies found no association between DHEAS and depression, whereas three studies reported an inverse association. Similarly, most of the studies (n = 4) with longitudinal data reported no association, whereas two studies reported either an inverse association or mixed results for DHEAS and depression severity. No association between DHEA and depression was found irrespective of the study design. Heterogeneity of design was a barrier to meta-analysis and between study comparison. The majority of studies were limited by high risk of bias in at least one assessed domain.Conclusion and relevance: This systematic review does not support an association between endogenous DHEA/DHEAS and depression in postmenopausal women.

Effectiveness of Levonorgestrel Releasing Intrauterine System in Perimenopausal Women with Heavy Menstrual Bleeding: A Prospective Study at a Teaching Hospital in India

Nidhi 1, Archana Kumari 2, Sarita Tirkey 1, Jay Prakash 3

Objectives: To evaluate the effect of levonorgestrel-releasing intrauterine system (LNG-IUS) on heavy menstrual bleeding in perimenopausal women. Methods: This was a prospective, observational clinical study conducted on 42 perimenopausal women with heavy menstrual bleeding who met the study eligibility criteria. LNG-IUS was inserted in the postmenstrual phase following baseline evaluation. The patients were followed up at the 4, 12, and 24 weeks. Pictorial blood assessment chart (PBAC) score, hemoglobin and serum ferritin levels, and endometrial thickness were assessed before insertion and during the follow-up visits. Results: Two patients (4.8%) were lost to follow-up, three patients (7.1%) opted for hysterectomy, two women (4.8%) experienced spontaneous expulsion and 35 (83.3%) women continued the usage. Menstrual blood loss assessed using the median PBAC score (interquartile range) significantly reduced ($P < 0.001$) from the pre-insertion level of 280 (246-306) to 124 (60-200) at 4 weeks to 45 (34-76) at 12 weeks and further to 32 (20-50) at the end of 24 weeks. Simultaneously, a significant ($P < 0.001$) improvement in the mean hemoglobin and serum ferritin levels and a significant ($P < 0.001$) decrease in endometrial thickness were observed. The most common side effect was spotting (50.0%) and vaginal discharge (38.1%). Conclusions: LNG-IUS causes a remarkable reduction in menstrual blood loss and marked improvement in dysmenorrhea. It also reduces anemia by improving the hemoglobin and ferritin levels. Thus, it can serve as an effective treatment option for heavy menstrual bleeding in perimenopausal women and prevent the need for a hysterectomy.