



Selección de Resúmenes de Menopausia

Semana del 6 al 12 de marzo de 2019

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Overeating, caloric restriction and breast cancer risk by pathologic subtype: the EPIGEICAM study.

Lope V, Martín M, Castelló A, Ruiz A, Casas AM, Baena-Cañada JM, Antolín S, Ramos-Vázquez M, et al.

This study analyzes the association of excessive energy intake and caloric restriction with breast cancer (BC) risk taking into account the individual energy needs of Spanish women. We conducted a multicenter matched case-control study where 973 pairs completed lifestyle and food frequency questionnaires. Expected caloric intake was predicted from a linear regression model in controls, including calories consumed as dependent variable, basal metabolic rate as an offset and physical activity as explanatory. Overeating and caloric restriction were defined taking into account the 99% confidence interval of the predicted value. The association with BC risk, overall and by pathologic subtype, was evaluated using conditional and multinomial logistic regression models. While premenopausal women that consumed few calories (>20% below predicted) had lower BC risk (OR = 0.36; 95% CI = 0.21-0.63), postmenopausal women with an excessive intake ($\geq 40\%$ above predicted) showed an increased risk (OR = 2.81; 95% CI = 1.65-4.79). For every 20% increase in relative (observed/predicted) caloric intake the risk of hormone receptor positive (p-trend < 0.001) and HER2+ (p-trend = 0.015) tumours increased 13%, being this figure 7% for triple negative tumours. While high energy intake increases BC risk, caloric restriction could be protective. Moderate caloric restriction, in combination with regular physical activity, could be a good strategy for BC prevention.

Post Reprod Health. 2019 Mar 7:2053369119833583. doi: 10.1177/2053369119833583. [Epub ahead of print]

Prevalence of hyperplasia and cancer in endometrial polyps in women with postmenopausal bleeding: A systematic review and meta-analysis.

Ghoubara A, Price MJ, Fahmy MSE, Ait-Allah AS, Ewies A.

There is wide variation in reporting the prevalence of hyperplasia and cancer in endometrial polyps in women with postmenopausal bleeding. Most studies reported heterogenous populations of pre- and postmenopausal women both symptomatic and asymptomatic, making data interpretation difficult. The aim of this work is to quantify the prevalence of hyperplasia and cancer in polyps in women with postmenopausal bleeding aiming to produce data that help inform clinical practice as whether it is safer to remove all polyps, or some women could be offered expectant management. The search terms used were Medical Subject Headings terms, text words, truncations and word variations of the words or phrases 'endometrial polyp' or 'uterine polyp' or 'womb polyp' and 'postmenopause' or 'menopause'. Search was limited to human studies and English language articles. Studies reporting separate analysis for women with postmenopausal bleeding were included. The included articles were assessed for risk of bias using the 'Quality in Prognosis Studies' tool. The prevalence was estimated with a random effect model using 'DerSimonian and Laird' method. The pooled estimate of prevalence of hyperplasia and cancer was 9% (95% confidence interval: 6.5%-11.5%). An I² statistic of 77.2% suggests likely substantial heterogeneity. However, adjustment for small study effects had no influence on the pooled prevalence estimate suggesting no evidence for publication bias. Sensitivity analyses showed that no study exerted a big influence on the pooled estimate. The prevalence of hyperplasia and cancer in endometrial polyps in women with postmenopausal bleeding is high enough to warrant removal for accurate histopathological diagnosis.

Aging Cell. 2019 Mar 7:e12939. doi: 10.1111/accel.12939. [Epub ahead of print]

Hormone replacement therapy attenuates hearing loss: Mechanisms involving estrogen and the IGF-1 pathway.

Williamson TT, Ding B, Zhu X, Frisina RD.

Estradiol (E) is a multitasking hormone that plays a prominent role in the reproductive system, and also contributes to physiological and growth mechanisms throughout the body. Frisina and colleagues have previously demonstrated the beneficial effects of this hormone, with E-treated subjects maintaining low auditory brainstem response (ABR)

thresholds relative to control subjects (Proceedings of the National Academy of Sciences of the United States of America, 2006;103:14246; Hearing Research, 2009;252:29). In the present study, we evaluated the functionality of the peripheral and central auditory systems in female CBA/CaJ middle-aged mice during and after long-term hormone replacement therapy (HRT) via electrophysiological and molecular techniques. Surprisingly, there are very few investigations about the side effects of HRT in the auditory system after it has been discontinued. Our results show that the long-term effects of HRT are permanent on ABR thresholds and ABR gap-in-noise (GIN) amplitude levels. E-treated animals had lower thresholds and higher amplitude values compared to other hormone treatment subject groups. Interestingly, progesterone (P)-treated animals had ABR thresholds that increased but amplitude levels that remained relatively the same throughout treatment. These results were consistent with qPCR experiments that displayed high levels of IGF-1R in the stria vascularis (SV) of both E and P animal groups compared to combination treatment (E + P) animals. IGF-1R plays a vital role in mediating anti-apoptotic responses via the PI3K/AKT pathway. Overall, our findings gain insights into the neuro-protective properties of E hormone treatments as well as expand the scientific knowledge base to help women decide whether HRT is the right choice for them.

Drug Alcohol Depend. 2019 Feb 27;197:197-202. doi: 10.1016/j.drugalcdep.2019.01.025. [Epub ahead of print]
The effect of alcohol on osteoporosis: A systematic review and meta-analysis.

Cheraghi Z, Doosti-Irani A, Almasi-Hashiani A, Baigi V, Mansournia N, Etminan M, Mansournia MA.
 BACKGROUND: Osteoporosis is a multifactorial disease hallmarked by the interaction of genetic, nutritional and environmental factors. We aimed to assess the effect of alcohol consumption on the osteoporosis by undertaking a systematic review and meta-analysis. METHODS: We searched electronic databases including MEDLINE, Scopus, and Web of Science until June 2018. We identified all pertinent observational studies that examined the risk of OSTEOPOROSIS with alcohol use including cohort, case-control and cross-sectional studies. Relative risks (RR) for cohort studies and odds ratios (ORs) for case-control studies were pooled using the random effects model. Risk of bias was assessed using the Newcastle-Ottawa scale. RESULTS: From a pool of 3479 studies identified six met the study inclusion criteria (three case control, two cohorts and one cross-sectional study). Compared with abstainers of alcohol, persons consuming 0.5-1 drinks per day had 1.38 times the risk of developing osteoporosis (adjusted RR = 1.38, 95% CI: 0.90-2.12), persons consuming 1-2 drinks per day had 1.34 times the risk of developing OSTEOPOROSIS (adjusted RR = 1.34, 95% CI: 1.11-1.62), and persons consuming two drinks or more per day had 1.63 times the risk of developing osteoporosis (adjusted RR = 1.63, 95% CI: 1.01-2.65). We found a positive association between alcohol consumption and osteoporosis in the case-control studies (adjusted OR = 2.95, 95% CI: 1.78-4.90). CONCLUSION: Our study demonstrates a positive relationship between alcohol consumption and osteoporosis.

JCI Insight. 2019 Mar 7;4(5). pii: 124865. doi: 10.1172/jci.insight.124865. eCollection 2019 Mar 7.

Changes in body composition and weight during the menopause transition.

Greendale GA, Sternfeld B, Huang M, Han W, Karvonen-Gutierrez C, Ruppert K, Cauley JA, Finkelstein JS, et al.
 The relation between the menopause transition (MT) and changes in body composition or weight remains uncertain. We hypothesized that, independent of chronological aging, the MT would have a detrimental influence on body composition. METHODS: Participants were from the longitudinal Study of Women's Health Across the Nation (SWAN) cohort. We assessed body composition by dual energy x-ray absorptiometry. Multivariable mixed effects regressions fitted piece-wise linear models to repeated measures of outcomes as a function of time before or after the final menstrual period (FMP). Covariates were age at FMP, race, study site, and hormone therapy. RESULTS: Fat and lean mass increased prior to the MT. At the start of the MT, rate of fat gain doubled, and lean mass declined; gains and losses continued until 2 years after the FMP. After that, the trajectories of fat and lean mass decelerated to zero slope. Weight climbed linearly during premenopause without acceleration at the MT. Its trajectory became flat after the MT. CONCLUSION: Accelerated gains in fat mass and losses of lean mass are MT-related phenomena. The rate of increase in the sum of fat mass and lean mass does not differ between premenopause and the MT; thus, there is no discernable change in rate of weight gain at the start of the MT.

Menopause. 2019 Mar 4. doi: 10.1097/GME.0000000000001312. [Epub ahead of print]

Menopause symptoms and chronic pain in a national sample of midlife women veterans.

Gibson CJ, Li Y, Bertenthal D, Huang AJ, Seal KH.

OBJECTIVE: Women are more likely than men to suffer chronic pain, with the highest rates seen in midlife. The symptoms that characterize menopause broadly affect health and well-being, but their contribution to chronic pain risk during this period is poorly understood. To address this gap in knowledge, we examined relationships between indicators of menopause symptoms and chronic pain among midlife women veterans, a population with prevalent chronic pain diagnoses and elevated risk for bothersome menopause symptoms. **METHODS:** This is a cross-sectional analysis of national Veterans Health Administration medical and pharmacy records. Using national medical and pharmacy records from women veterans aged 45 to 64 with at least one VA encounter during 2014 and/or 2015 (n=200,901), we developed multivariable logistic regression models to examine associations between menopause symptoms (defined by menopause symptom-related diagnoses on ≥ 2 encounters and/or menopause hormone therapy use) and chronic pain outcomes, adjusting for age, race, body mass index, mental health diagnoses, and substance use disorders. **RESULTS:** In this national sample of midlife women veterans (mean age 54.3 ± 5.4), 26% had menopause symptoms, 52% had chronic pain, and 22% had ≥ 2 distinct chronic pain diagnoses. In multivariable analyses, women with menopause symptoms had nearly two-fold odds of chronic pain (odds ratio 1.89, 95% confidence interval 1.85-1.94, $P < 0.001$) and multiple chronic pain diagnoses (odds ratio 1.86, 95% confidence interval 1.83-1.90). **CONCLUSIONS:** These findings raise the possibility within this vulnerable critical period, midlife women with a higher menopause symptom burden may be most vulnerable for chronic pain.

Climacteric. 2019 Mar 4:1-9. doi: 10.1080/13697137.2019.1574738. [Epub ahead of print]

The global prevalence of primary ovarian insufficiency and early menopause: a meta-analysis.

Golezar S, Ramezani Tehrani F, Khazaei S, Ebadi A, Keshavarz Z.

OBJECTIVE: The aim of this study was to estimate the global prevalence of primary ovarian insufficiency (POI) and early menopause (EM). **METHODS:** A comprehensive literature search was performed in several databases to retrieve relevant English articles published between 1980 and 2017. To assess the methodological quality of the studies, the Newcastle-Ottawa Scale was used. The heterogeneity of results across the studies was assessed using Cochran's Q test and quantified by the I² statistic. Prevalence estimates of all studies were pooled using a random-effects meta-analysis model at a confidence level of 95%. **RESULTS:** A total of 8937 potentially relevant articles were identified from the initial searches. Thirty-one studies met the inclusion criteria and were included in this meta-analysis. The pooled prevalence of POI and EM was calculated as 3.7% (95% confidence interval: 3.1, 4.3) and 12.2% (95% confidence interval: 10.5, 14), respectively. The prevalence of POI was higher in medium and low Human Development Index countries. The prevalence trend did not change over time. **CONCLUSION:** The prevalence of POI and EM in women is considerable. The results of this study could contribute to consciousness-raising of health policy-makers toward the necessity of prioritizing, planning, and allocating health resources as preventive and treatment interventions for these women.

Prim Care Diabetes. 2019 Feb 27. pii: S1751-9918(18)30406-6. doi: 10.1016/j.pcd.2019.02.001. [Epub ahead of print]

Association of age at menopause and type 2 diabetes: A systematic review and dose-response meta-analysis of cohort studies.

Guo C, Li Q, Tian G, Liu Y, Sun X, Yin Z, Li H, Chen X, Liu X, Zhang D, Cheng C, Liu L, Liu F, Zhou Q, et al.

AIMS: Early age at menopause has been associated with increased incidence of type 2 diabetes mellitus (T2DM), but the quantitative association between age at menopause and T2DM was unclear. We performed a meta-analysis to assess the dose-response association between age at menopause and T2DM. **METHODS:** PubMed, Embase and Web of Science were searched up to January 5, 2019 for cohort studies that evaluated the association of age at menopause and risk of T2DM. Relative risks (RRs) and 95% confidence intervals (95% CIs) were pooled by using the random-effects models. Restricted cubic spline model was used to evaluate the linear or nonlinear relation. **RESULTS:** We identified 6 studies for the meta-analysis (267,284 women and 19,654 cases of T2DM). The pooled RR was 0.64 (95% CI 0.44-0.94) comparing the latest with the earliest category of age at menopause. The risk of T2DM was reduced by 10% (RR=0.90, 95% CI, 0.84-0.98) with each 5-year increment in age at menopause. We found an inverse linear association between age at menopause and T2DM. **CONCLUSIONS:** Our results suggest that later age at menopause was associated with lower risk of T2DM.