



Selección de Resúmenes de Menopausia

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Sex Differences in Associations of Arterial Compliance With Coronary Artery Plaque and Calcification Burden.

Coutinho T, Yam Y, Chow BJW Dwivedi G, Inácio J.

BACKGROUND: Coronary artery disease is a leading killer of women. Arterial stiffness predicts myocardial infarction, and postmenopausal women have lower arterial compliance (AC) than men. We hypothesized that lower AC would be associated with greater burden of coronary artery plaque and calcification, and that these associations would be stronger in women than men. **METHODS AND RESULTS:** We evaluated 3639 consecutive adults without coronary artery disease history who had coronary computed tomography between 2006 and 2014. Coronary artery calcification was calculated using the Agatston method. Plaque extent was assessed by the number of arterial segments with visible plaque divided by the number of visualized segments $\times 100$ (percent plaque score). Indexed AC was calculated as stroke volume index/central pulse pressure. We used step-wise multivariable linear regression to assess associations of log indexed AC with log (percent plaque score+1) and log (coronary artery calcification+1). Sex-specific models were performed if the interaction sex \times AC was significant. Mean age was 57 ± 11 years, 53% were men, and 71% were hypertensive. Interaction term sex \times AC was significant for both models ($P=0.008$ for percent plaque score and 0.022 for coronary artery calcification). Lower indexed AC was associated with higher percent plaque score and coronary artery calcification in women ($\beta \pm SE$: -0.231 ± 0.113 , $P=0.042$ and -0.334 ± 0.166 , $P=0.044$, respectively), but not in men ($\beta \pm SE$: -0.062 ± 0.104 , $P=0.551$ and 0.114 ± 0.173 , $P=0.510$, respectively). **CONCLUSIONS:** Lower AC is associated with greater burden of coronary artery plaque and calcification in women, but not in men. Our findings highlight low AC as a correlate of more-advanced coronary artery disease and as a potential link to the worse cardiovascular outcomes in women.

Expert Rev Pharmacoecon Outcomes Res. 2017 Sep 1. [Epub ahead of print]

The projected public health and economic impact of vitamin D fortified dairy products for fracture prevention in France.

Hilgsmann M, Reginster JY.

BACKGROUND: There is a paucity of research that projects the public health and economic impact of healthcare interventions in the future. In this study, we aimed to estimate the public health and economic impact of vitamin D fortified dairy products for the years 2020, 2030, 2040, 2050 and 2060. **METHODS:** We used a previously validated Markov microsimulation model that was designed to assess the public health and economic impact of dairy products for fracture prevention in the French general population aged over 60 years in the year 2015. **RESULTS:** The expected benefit (in terms of fractures prevented) of the recommended intake of dairy products compared to the absence of appropriate intake is expected to increase by 63% in 2040 and by 85% in 2060. The cost per quality-adjusted life years gained of the appropriate intake of dairy products is expected to decrease from €58,244 in 2015 to €42,616 in 2060. **CONCLUSION:** The potential public health and economic benefits of vitamin D fortified dairy products is expected to substantially increase in the future, especially in the population aged over 80 years. Decision makers should be aware of the current and future potential benefits of dairy products to protect bone fractures.

Breast Cancer Res Treat. 2017 Aug 31. doi: 10.1007/s10549-017-4481-4. [Epub ahead of print]

BMI change and abdominal circumference are risk factors for breast cancer, even in Asian women.

Suzuki Y, Tsunoda H, Kimura T, Yamauchi H.

PURPOSE: We investigated the association between breast cancer incidence and obesity among Asian women. **METHODS:** We used data from 30,109 women who had undergone medical check-ups and opportunistic breast cancer screening at least twice at the St. Luke's International Hospital Affiliated Clinic, Center for Preventive Medicine, between April 1, 2005 and March 31, 2014. This study evaluated obesity through body mass index (BMI)

at age 18-20 years (BMI18-20y), BMI at research entry (entry BMI), change of BMI from age 18-20 to research entry (Δ BMI), abdominal circumference at research entry (AC), and HbA1c [N] at research entry (HbA1c). We used a multivariate Cox proportional hazard model to evaluate hazard ratios (HRs) and 95% confidence intervals (95% CIs). RESULTS: Of the 30,109 women, 325 were initially diagnosed with breast cancer over 131,657 person-years. Postmenopausal women whose BMI increased $\geq +5.0$ were significantly more likely to develop breast cancer (HR 1.902, 95% CI 1.202-3.009) than were the stable BMI group (Δ BMI: -2.5 to +2.5). Postmenopausal women with AC ≥ 90 cm were significantly likelier to develop breast cancer than were those with AC < 70 cm (HR 2.500, 95% CI 1.091-5.730). Among postmenopausal women whose BMI18-20y was ≥ 20 , those with high (≥ 6.5) HbA1c were more likely to develop breast cancer than those with low (< 5.5) HbA1c (HR 3.325, 95% CI 1.307-8.460). CONCLUSIONS: Breast cancer incidence and obesity are positively associated in postmenopausal Asian women.

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Hip fracture risk and safety with alendronate treatment in the oldest old.

Axelsson KF, Wallander M, Johansson H, Lundh D, Lorentzon M.

BACKGROUND: There is high evidence for secondary prevention of fractures, including hip fracture, with alendronate treatment, but alendronate's efficacy to prevent hip fractures in the oldest-old (≥ 80 years old), the population with the highest fracture risk, has not been studied. OBJECTIVE: To investigate if alendronate treatment among the oldest old with prior fracture was related to decreased hip fracture rate and sustained safety. METHODS: Using a national database of men and women undergoing a fall risk assessment at a Swedish healthcare facility, we identified 90 795 patients who were 80 years or older and had a prior fracture. Propensity score matching (four to one) was then used to identify 7844 controls to 1961 alendronate treated patients. The risk of incident hip fracture was investigated with Cox-models and the interaction between age and treatment was investigated using an interaction term. RESULTS: The case and control groups were well balanced in regard to age, sex, anthropometrics and comorbidity. Alendronate treatment was associated with a decreased risk of hip fracture in crude (Hazard Ratio (HR) 0.62 (0.49-0.79), $p < 0.001$) and multivariable models (HR 0.66 (0.51-0.86), $p < 0.01$). Alendronate was related to reduced mortality risk (HR 0.88 (0.82-0.95) but increased risk of mild upper gastrointestinal symptoms (UGI) (HR 1.58 (1.12-2.24). The alendronate association did not change with age for hip fractures or mild UGI. CONCLUSION: In old patients with prior fracture, alendronate treatment reduces the risk of hip fracture with sustained safety, indicating that this treatment should be considered in these high-risk patients.

Neurology. 2017 Aug 30. doi: 10.1212/WNL.0000000000004425. [Epub ahead of print]

Sex differences in Alzheimer risk: Brain imaging of endocrine vs chronologic aging.

Mosconi L, Berti V, Quinn C, McHugh P, Petrongolo G, Varsavsky I, Osorio RS, Pupi A, Vallabhajosula S, et al

OBJECTIVE: This observational multimodality brain imaging study investigates emergence of endophenotypes of late-onset Alzheimer disease (AD) risk during endocrine transition states in a cohort of clinically and cognitively normal women and age-matched men. METHODS: Forty-two 40- to 60-year-old cognitively normal women (15 asymptomatic perimenopausal by age [CNT], 13 perimenopausal [PERI], and 14 postmenopausal [MENO]) and 18 age- and education-matched men were examined. All patients had volumetric MRI, 18F-fluoro-2-deoxyglucose (FDG)-PET (glucose metabolism), and Pittsburgh compound B-PET scans (β -amyloid [A β] deposition, a hallmark of AD pathology). RESULTS: As expected, the MENO group was older than the PERI and CNT groups. Otherwise, groups were comparable on clinical and neuropsychological measures and APOE4 distribution. Compared to CNT women and to men, and controlling for age, PERI and MENO groups exhibited increased indicators of AD endophenotype, including hypometabolism, increased A β deposition, and reduced gray and white matter volumes in AD-vulnerable regions ($p < 0.001$). AD biomarker abnormalities were greatest in MENO, intermediate in PERI, and lowest in CNT women ($p < 0.001$). A β deposition was exacerbated in APOE4-positive MENO women relative to the other groups ($p < 0.001$). CONCLUSIONS: Multimodality brain imaging indicates sex differences in development of the AD endophenotype, suggesting that the preclinical AD phase is early in the female aging process and coincides with the endocrine transition of perimenopause. These data indicate that the optimal window of opportunity for therapeutic intervention in women is early in the endocrine aging process.

Gynecol Endocrinol. 2017 Aug 30;1-4. doi: 10.1080/09513590.2017.1370645. [Epub ahead of print]

Prevention of recurrent lower urinary tract infections in postmenopausal women with genitourinary syndrome: outcome after 6 months of treatment with ospemifene.

Schiavi MC, Di Pinto A, Sciuga V, Faiano P, Di Tucci C, D'oria O, Martoccia A, Prata G, Carraro C, Ostuni R, et al. Aim of this study was to evaluate the efficacy of ospemifene in the prevention of recurrent lower urinary tract infections in postmenopausal women with vulvovaginal atrophy. The study have a retrospective design. Thirty-nine patients were enrolled. Patients underwent clinical examination and urine culture. The urinary symptoms and the quality of life were evaluated with UTISA score, PUF and SF-36 questionnaires before and after treatment. All 39 patients received ospemifene 60 mg one tablet/daily for 6 months. Adverse effects and complications were assessed. Thirty-nine patients were enrolled in the study. Two patients experienced one new UTI episode and the mean number of positive urine culture decreased significantly after 6 months (3.65 ± 2.12 vs 0.25 ± 0.17 , $p < .0001$). The mean number of urinary infection symptoms decreased significantly after treatment; dysuria reduced (4.76 ± 2.45 vs 0.89 ± 1.12). PUF score and SF-36 showed a statistically significant change (22.43 ± 5.89 vs 12.14 ± 3.21) and (52.86 ± 9.21 vs 83.43 ± 10.76). No adverse effects were reported and the total success rate was the 92.3% after 6 months at PGI-I. Ospemifene is a valid alternative with excellent tolerability for the UTIS prevention in postmenopausal patients.

JAMA Intern Med. 2017 Aug 28. doi: 10.1001/jamainternmed.2017.3877. [Epub ahead of print]

Effects of Oral vs Transdermal Estrogen Therapy on Sexual Function in Early Postmenopause: Ancillary Study of the Kronos Early Estrogen Prevention Study (KEEPS).

Taylor HS, Tal AI, Pal L, Li F, Black DM, Brinton EA, Budoff MJ, Cedars MI, Du W, Hodis HN, Lobo RA, et al Importance: Sexual dysfunction, an important determinant of women's health and quality of life, is commonly associated with declining estrogen levels around the menopausal transition. Objective: To determine the effects of oral or transdermal estrogen therapy vs placebo on sexual function in postmenopausal women. Design, Setting, and Participants: Ancillary study of the Kronos Early Estrogen Prevention Study (KEEPS), a 4-year prospective, randomized, double-blinded, placebo-controlled trial of menopausal hormone therapy in healthy, recently menopausal women. Of 727 KEEPS enrollees, 670 agreed to participate in this multicenter ancillary study. Women were 42 to 58 years old, within 36 months from last menstrual period. Data were collected from July 2005 through June 2008 and analyzed from July 2010 through June 2017. Interventions: Women were randomized to either 0.45 mg/d oral conjugated equine estrogens (o-CEE), 50 µg/d transdermal 17β-estradiol (t-E2), or placebo. Participants also received 200 mg oral micronized progesterone (if randomized to o-CEE or t-E2) or placebo (if randomized to placebo estrogens) for 12 days each month. Main Outcomes and Measures: Aspects of sexual function and experience (desire, arousal, lubrication, orgasm, satisfaction, and pain) were assessed using the Female Sexual Function Inventory (FSFI; range, 0-36 points; higher scores indicate better sexual function). Low sexual function (LSF) was defined as an FSFI overall score of less than 26.55. Distress related to low FSFI score (required for the diagnosis of sexual dysfunction) was not evaluated. Results: The 670 participants had a mean (SD) age of 52.7 (2.6) years. The t-E2 treatment was associated with a significant yet moderate improvement in the FSFI overall score across all time points compared with placebo (average efficacy, 2.6; 95% CI, 1.11-4.10; adjusted $P = .002$). With o-CEE treatment, there was no significant difference in FSFI overall score compared with placebo (mean efficacy, 1.4; 95% CI, -0.1 to 2.8; adjusted $P = .13$). There was no difference in FSFI overall score between the t-E2 and o-CEE groups on average across 48 months (adjusted $P = .22$). In the individual domains of sexual function, t-E2 treatment was associated with a significant increase in mean lubrication (0.61; 95% CI, 0.25-0.97; $P = .001$) and decreased pain (0.67; 95% CI, 0.25-1.09; $P = .002$) compared with placebo. Overall, the proportion of women with LSF was significantly lower after t-E2 treatment compared with placebo (67%; 95% CI, 55%-77% vs 76%; 95% CI, 67%-83%; $P = .04$). For o-CEE there was no significant reduction in the odds of LSF. Conclusions and Relevance: Treatment with t-E2 modestly improved sexual function in early postmenopausal women, but whether it relieved symptoms of distress is not known.

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Sexual Function in Women Suffering From Genitourinary Syndrome of Menopause Treated With Fractionated CO2 Laser.

Salvatore S, Pitsouni E, Del Deo F, Parma M, Athanasiou S, Candiani M.

INTRODUCTION: Genitourinary syndrome of menopause (GSM) has a significant impact on the trophism of the genital and lower urinary tracts and can considerably impair sexual function. Fractional CO2 laser has a regenerative effect on vulvovaginal tissue trophism after menopause. **AIM:** To review the available literature on the effect of fractional CO2 laser on the sexual function of postmenopausal women affected by GSM. **METHODS:** A database search was carried out using the terms CO2laser, vaginal atrophy, sexual function, dyspareunia, and genitourinary syndrome of menopause and excluding studies using other types of laser or including breast cancer survivors with vulvovaginal atrophy. For statistical analysis, the estimated overall laser effect was computed (when at least two studies were involved) and data type of generic inverse variance was computed using inverse variance as the statistical method, a random-effects model, and the difference in means as an effect measurement. **MAIN OUTCOME MEASURES:** Different methods of evaluating sexual function were reported and studies were grouped and analyzed accordingly. Subjective assessment for dyspareunia was evaluated with a 10-point visual analog scale. Patient-reported outcome for an overall perception of sexual function was evaluated with a Likert scale. The Female Sexual Function Index was used as a condition-specific questionnaire. **RESULTS:** Six articles were considered for this review. A total of 273 women (mean age = 57.8 years) were treated with the same protocol in all studies. Compared with baseline, at the end of the treatment, dyspareunia significantly decreased in severity ($P < .001$), and the patient's perception of overall sexual function showed a statistically significant improvement ($P < .001$). At the last follow-up visit, the Female Sexual Function Index score for each single domain and overall score was significantly better than at entry ($P < .001$). **CONCLUSION:** Fractional CO2 laser can improve sexual function in postmenopausal women affected by GSM by restoring a better trophism in the lower genitourinary tract.