

# Selección de Resúmenes de Menopausia

Semana del 22 al 28 de agosto de 2018 María Soledad Vallejo. Clínica Quilín. Universidad de Chile

### Arthritis Care Res (Hoboken). 2018 Aug 24. doi: 10.1002/acr.23735. [Epub ahead of print] Statin use and knee osteoarthritis outcomes: A longitudinal cohort study.

Veronese N, Kovanagi A, Stubbs B4, Cooper C7, Guglielmi G, Rizzoli R, Schofield P6 Punzi L, Al-Daghri N, et al. OBJECTIVE: Statins have several pleiotropic effects, but the literature regarding the possible relationship between statins use and outcomes in knee osteoarthritis (OA) is limited. We investigated whether statins use is associated with lower risk of radiographic (ROA), radiographic symptomatic knee OA (SxOA) and pain in North American people. METHODS: A total of 4,448 community-dwelling adults from the Osteoarthritis Initiative were followed-up for 4 years. Stating use (including the time from baseline and the type) was defined through self-report information and confirmed by a trained interviewer. Knee OA outcomes included incident (1) ROA, (2) SxOA, as the new onset of a combination of a painful knee and ROA, (3) knee pain worsening, i.e. a Western Ontario and McMaster Universities Osteoarthritis Index difference between baseline and each annual exam >14%. RESULTS: At baseline, 1,127 participants (=25.3%) used statins. Based on a multivariable Poisson regression analysis with robust variance estimators, any statins use was not associated with lower risk of pain worsening (relative risk, RR=0.97; 95%CI, confidence intervals: 0.93-1.02), incident ROA or SxOA. However, statins use > 5 years (RR=0.91; 95%CI: 0.83-0.997) and atorvastatin use (RR=0.95; 95% CI: 0.91-0.996) were associated with a reduced risk of developing pain, whilst rosuvastatin to a higher risk (RR=1.18; 95% CI: 1.12-1.24). The adjustment for the propensity score confirmed these findings. CONCLUSION: The effect of statins use on knee OA outcomes remains unclear, although in our study those using statins for over five years and those using atorvastatin reported a significant lower risk of developing knee pain. This article is protected by copyright.

## Asian Pac J Cancer Prev. 2018 Aug 24;19(8):2199-2203. Oral Contraceptive and Breast Cancer Risks: a Case Control Study in Six

## **Referral Hospitals in Indonesia**

#### Wahidin M, Djuwita R, Adisasmita A.

OBJECTIVE: This study aimed to understand the effects of the use of oral contraceptive to breast cancer risk in six referral hospitals in Indonesia. METHODS: The research design was hospital based case-control, conducted in 2013. Population was women patients aged 15 years and above in six cancer-referral hospitals in five provinces. Total of 762 people were included in this study consisting of 381 who are diagnosed with breast cancer as confirmed by histopathologic examination in inpatient surgery ward, and 381 people who are not diagnosed with breast cancer based on interview in outpatient surgery ward as control group. A set of data were collected including the use of oral contraceptives, age, early menarche, childbirth status, breastfeeding status, obesity, unhealthy diet, history of benign breast tumors, family history of breast cancer, and age of menopause. RESULT: Results showed that Odds Ratio (OR) of patients using oral contraceptive <6 years was 1.93 (95% CI 1.23 – 3.03) and OR of those using oral contraceptive. CONCLUSION: Use of oral contraceptive in patients was indicated to increase the risk of breast cancer. Longer the duration of using oral contraceptive tend to have higher the risk of breast cancer.

### J Clin Endocrinol Metab. 2018 Aug 17. doi: 10.1210/jc.2018-01095. [Epub ahead of print] Association of serum thyroid-stimulating hormone with hand grip strength in community-dwelling euthyroid elderly.

#### Kim BJ, Lee SH, Isales CM, Hamrick MW, Kwak MK, Koh JM.

Context: Despite apparent muscle weakness in overt or even subclinical hyperthyroidism, the effects of thyroid function in the reference range on muscle strength are unknown. Objective: To investigate the association of serum thyroid-stimulating hormone (TSH) and free T4 with hand grip strength (HGS) in euthyroid elderly. Design and Setting: A nationally representative population-based, cross-sectional study from the Korea National Health and Nutrition Examination Surveys. Participants: Six hundred and fifty men aged  $\geq$ 50 years and 533 postmenopausal

women. Main Outcome Measures: HGS was measured using a digital grip strength dynamometer, and low muscle strength was defined based on the Korean specific cut-off point of HGS (28.9 and 16.8 kg in men and women, respectively). Results: After adjustment for confounders, lower serum TSH, but not free T4, was associated with lower HGS in men (P = 0.032). Compared with men with high-normal TSH, those with low-normal TSH consistently showed 5.0% lower HGS (P = 0.027), with a linear decrease in HGS across decreasing serum TSH quartiles (P for trend = 0.018). Men with low muscle strength had 22.0% lower serum TSH than those without (P = 0.015), and the odds for the risk of low muscle strength was 3.76 times higher among men with low-normal TSH than it was among those with high-normal TSH (P = 0.021). However, these associations were not observed in postmenopausal women. Conclusions: These results suggest that serum TSH level at the lower end of reference range may be associated with low muscle strength, especially in older men.

#### Lipids Health Dis. 2018 Aug 22;17(1):197. doi: 10.1186/s12944-018-0828-z.

# Atherogenic index of plasma (AIP): a novel predictive indicator for the coronary artery disease in postmenopausal women.

#### Wu TT, Gao Y, Zheng YY, Ma YT, Xie X.

BACKGROUND: Dyslipidemia is one of the most important factors for coronary artery disease (CAD). Atherogenic index of plasma (AIP) is a novel indicator involved in dyslipidemia. However, the relation between AIP and CAD in postmenopausal women remains unclear. We hypotheses that AIP is a strong predictive indicator of CAD in postmenopausal women. METHODS: A propensity score matching case-control study including 348 postmenopausal CAD cases and 348 controls was conducted in the present study. RESULTS: Compared with controls, CAD patients had higher levels of total cholesterol (TC), triglyceride (TG), low-density lipoprotein cholesterol (LDL-C) and apolipoprotein B (APOB), but lower high-density lipoprotein cholesterol (HDL-C) and apolipoprotein A-1 (APOA-1). The values of nontraditional lipid profiles, including non-HDL-C, TC/HDL-C, LDL-C/HDL-C, non-HDL-C/HDL-C (atherogenic index, AI), TC\*TG\*LDL/HDL-C (lipoprotein combine index, LCI), log(TG/HDL-C) (atherogenic index of plasma, AIP) and APOB/APOA-1 were all significantly higher in the CAD patients. The results of Pearson correlation analyses showed AIP was positively and significantly correlated with TC (r = 0.092, P < 0.001), TG (r = 0.775, P = 0.015), APOB (r = 0.140, P < 0.001), non-HDL-C (r = 0.295, P < 0.001), TC/HDL-C (r = 0.626, P < 0.001), LDL-C/HDL-C (r = 0.469, P < 0.001), AI (r = 0.626, P < 0.001), LCI (r = 0.665, P < 0.001), APOB/APOA-1(r = 0.290, P < 0.001) and was negatively correlated with APOA-1 (r = -0.278, P < 0.001) and HDL-C (r = -0.665, P < 0.001). In the multivariate logistic regression analysis, AIP was an independent predictor of CAD. After adjusting for the traditional clinical prognostic factors including diabetes and hypertension, we found AIP could be an independent risk factor for CAD (odds ratio [OR], 3.290; 95% confidence interval [CI], 1.842-5.877, P<0.001). After adjusting for multiple clinical factors include diabetes, hypertension, smoking, heart ratio, fasting blood glucose, we found AIP also could a powerful risk factor, OR = 3.619, 95%CI (2.003-6.538), P < 0.001. CONCLUSION: The present study indicated that AIP might be a strong marker for predicting the risk of CAD in postmenopausal women.

# Menopause. 2018 Aug 20. doi: 10.1097/GME.00000000001200. [Epub ahead of print] Association of menopause and type 2 diabetes mellitus.

Ren Y, Zhang M, Liu Y, Sun X, Wang B, Zhao Y, Liu D, Liu X, Zhang D, Liu F, Cheng C, Liu L, Chen X, et al. OBJECTIVE: Limited information is available on the direct effect of menopause and risk of type 2 diabetes mellitus (T2DM) among women with different metabolic types. We aimed to investigate whether menopause is a direct risk factor for T2DM. METHODS: In this population-based cross-sectional study, women were recruited from a rural area of China from July to August 2013 and July to August 2014. Multivariate logistic regression analysis yielded adjusted odds ratios (ORs) and 95% CIs. Mediation analysis was performed to examine the contribution of age to menopause status-related T2DM. RESULTS: We included 8,191 women (median age 56, interquartile range 47-65). The prevalence of T2DM was 13.22%. Risk of T2DM was increased with postmenopause versus premenopause status after adjustment (adjusted OR [aOR]=1.90, 95% CI=1.51-2.37), with the strongest association between postmenopause status and T2DM among women with body mass index (BMI) <24.0kg/m (aOR, 3.25; 95% CI, 1.98-5.32). Risk of T2DM was increased with postmenopause status. T2DM association (indirect effect: OR=1.27, 95% CI=1.13-1.46; direct effect: OR=1.88, 95% CI=1.49-2.36). CONCLUSIONS: The prevalence of T2DM is high among women, and postmenopause status might be a stable and

significant risk factor for T2DM; especially, postmenopausal women with normal weight should not be ignored in addressing the risk.

Menopause. 2018 Aug 20. doi: 10.1097/GME.00000000001182. [Epub ahead of print]

Hormone therapy in postmenopausal women associated with risk of stroke and venous thromboembolism: a population-based cohort study in Taiwan. Chang WC, Wang JH, Ding DC.

OBJECTIVE: The aim of the study was to evaluate the risks and benefits of hormone therapy (HT) in postmenopausal women in Taiwan. METHODS: A retrospective cohort study was conducted using the Taiwan National Health Insurance Research Database, a population-based healthcare claims dataset. Eligible women, aged 40 to 65, were matched 1:1 by age and menopause year to avoid confounding through imbalanced baseline characteristics among the two groups (2,491 pairs). The primary outcomes were acute coronary syndrome (ACS), venous thromboembolism (VTE), and ischemic stroke (IS). RESULTS: Mean follow-up in the HT group was 30 months. Mean age of the HT group was 50 years. After adjusting for age, statin and anticoagulant use, hyperlipidemia, diabetes, and hypertension, the hazard ratios (95% CIs) for the HT group were increased: ACS, 3.73 (2.01-6.91); IS, 3.51 (2.41-5.11); and VTE, 2.51 (1.15-5.47). CONCLUSIONS: In postmenopausal Taiwanese women, HT may be associated with an increased risk of cardiovascular disease. Although the women in our population receiving HT were near menopausal age, their risk of cardiovascular disease was still higher than in the non-HT group.

## Am J Obstet Gynecol. 2018 Aug 17. pii: S0002-9378(18)30672-0.[Epub ahead of print] Acupuncture for Symptoms in Menopausal Transition: A Randomized Controlled Trial.

Liu Z, Ai Y, Wang W, Zhou K, He L, Dong G, Fang J, Fu W, Su T, Wang J, Wang R, Yang J, et al.

BACKGROUND: Acupuncture has been used for women during menopausal transition, but evidence is limited.

OBJECTIVES: To evaluate the efficacy of electroacupuncture on relieving symptoms of women during menopausal transition. STUDY DESIGN: We conducted a prospective, multicenter, randomized, participant-blinded trial in China mainland. Subjects were randomized to receive 24 treatment sessions of electroacupuncture at traditional acupoints or sham electroacupuncture at non-acupoints over 8 weeks with 24 weeks' follow-up. Primary outcome was the change from baseline in the total score of Menopause Rating Scale at week 8. Secondary outcomes included the changes from baseline in the average 24-h hot flash score, the Menopause Rating Scale subscale scores, the total score of menopause-specific quality of life questionnaire and its subscales, and serum female hormones. All analyses were performed with a 2-sided P value of less than 0.05 considered significant based on the intention-to-treat principle. RESULTS: A total of 360 women (180 in each group) with menopause-related symptoms during menopausal transition were enrolled between June 9th, 2013 and December 28th, 2015. At week 8, the reduction from baseline in the Menopause Rating Scale total score was 6.3 (95% CI, 5.0 to 7.7) in the electroacupuncture group and 4.5 (95% CI, 3.2 to 5.8) in the sham electroacupuncture group with a between-group difference of 1.8 (95% CI, 0.9 to 2.8; P = 0.0002), less than the minimal clinically important difference of 5 points' reduction. For secondary outcomes, the between-group differences for the decrease in the mean 24-h hot flash score were significant at weeks 8, 20 and 32, but all were less than the minimal clinically important difference reported in previous reports. Interestingly, the between-group differences for the menopause-specific quality of life questionnaire total score reduction were 5.7 at week 8, 7.1 at week 20 and 8.4 at week 32, greater than the minimal clinically important difference of 4 points. Changes from baseline in FSH, LH and E2 levels at weeks 8 and 20 (P >0.05 for all), with the exception of FSH/LH ratios (p = 0.0024 at week 8 and 0.0499 at week 20), did not differ between groups. CONCLUSION: Among women during menopausal transition, eight weeks' electroacupuncture treatment didn't seem to relieve menopausal symptoms, even though it appeared to improve their quality of life. Generalizability of the trial results may be limited by mild baseline menopause symptoms in the included participants.

Age Ageing. 2018 Aug 15. doi: 10.1093/ageing/afy125. [Epub ahead of print] Parental longevity predicts healthy ageing among women. Shadyab AH, Manson JE, Li W, Gass M, Brunner RL, Naughton MJ, Cannell B, Howard BV, LaCroix AZ.

3

Objective: to examine the association of parental longevity with healthy survival to age 90 years. Methods: this was a prospective study among a racially and ethnically diverse cohort of 22,735 postmenopausal women from the Women's Health Initiative recruited from 1993 to 1998 and followed through 2017. Women reported maternal and paternal ages at death and current age of alive parents. Parental survival categories were <70, 70-79 (reference), 80-89 and  $\geq$ 90 years (longevity). Healthy ageing was defined as reaching age 90 without major chronic conditions (coronary heart disease, stroke, diabetes, cancer, or hip fracture) or physical limitations. Results: women whose mothers survived to  $\geq$ 90 years were more likely to attain healthy ageing (OR, 1.25; 95% CI, 1.11-1.42) and less likely to die before age 90 (OR, 0.75; 95% CI, 0.68-0.83). Women whose fathers survived to  $\geq$ 90 years did not have significantly increased odds of healthy ageing but showed 21% (OR, 0.79; 95% CI, 0.70-0.90) decreased odds of death before age 90. Women whose mother and father both lived to 90 had the strongest odds of healthy ageing (OR, 1.38; 95% CI, 1.09-1.75) and decreased odds of death (OR, 0.68; 95% CI, 0.54-0.85). The proportion of healthy survivors was highest among women whose mother and father lived to 90 (28.6%), followed by those whose mother only lived to 90 (23.2%). Conclusions: parental longevity predicted healthy ageing in a national cohort of postmenopausal women, supporting the view that genetic, environmental, and behavioral factors transmitted across generations may influence ageing outcomes among offspring.

## JACC Cardiovasc Imaging. 2018 Aug 6. pii: S1936-878X(18)30551-5. [Epub ahead of print] Prediction of Subclinical Coronary Artery Disease With Breast Arterial Calcification and Low Bone Mass in Asymptomatic Women: Registry for the Women Health Cohort for Breast, Bone, and Coronary Artery Disease Study.

Yoon YE, Kim KM, Han JS, Kang SH, Chun EJ, Ahn S, Kim SM, Choi SI, Yun B, Suh JW.

OBJECTIVES: This study sought to determine whether evaluations of breast arterial calcification (BAC) and low bone mass (LBM) could improve the ability to predict subclinical coronary artery disease (CAD) in asymptomatic women. BACKGROUND: An improved risk stratification strategy beyond the measurement of conventional risk factors is needed to identify women at high risk of CAD. METHODS: The BBC (Women Health Registry Study for Bone, Breast, and Coronary Artery Disease) enrolled 2,100 asymptomatic women who underwent dual-energy X-ray absorptiometry, digital mammography, and coronary computed tomography angiography. We assessed the predicted 10-year atherosclerotic cardiovascular disease (ASCVD) risk and evaluated the presence and severity of BAC, LBM, coronary artery calcification (CAC), and coronary atherosclerotic plaque (CAP). RESULTS: CAC and CAP were found in 11.2% and 15.6% of participants, respectively. In women with CAC or CAP, increasing trends in the presence and severity of both BAC and LBM were observed. Both BAC and LBM were found to be associated with the presence of CAC (unadjusted odds ratios [OR]: 3.54 and 2.22, respectively) and CAP (unadjusted OR: 3.02 and 1.91, respectively). However, in multivariate analysis, only the presence of BAC and BAC score remained as independent predictors. For the prediction of CAC and CAP, addition of the BAC presence to the 10-year ASCVD risk significantly increased the areas under the curve (area under the curve: 0.71 to 0.72; p = 0.016; and area under the curve: 0.66 to 0.68; p = 0.010; respectively) and resulted in net reclassification index improvements (area under the curve: 0.304; p <0.001; and area under the curve: 0.245; p <0.001; respectively). CONCLUSIONS: The presence and severity of BAC and LBM were significantly associated with the risk of subclinical CAD in asymptomatic women. BAC evaluation especially provides an independent and incremental value over conventional risk algorithms.