Selección de Resúmenes de Menopausia

Semana del 20 al 26 de septiembre de 2017

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Arthritis Care Res (Hoboken). 2017 Sep 21. doi: 10.1002/acr.23416. [Epub ahead of print]

2017 American College of Rheumatology Guideline for the Prevention and Treatment of Glucocorticoid-Induced Osteoporosis.

Buckley L, Guyatt G, Fink H, McAlindon T.

The Voting Panel recommended oral bisphosphonates as a first choice and parenteral bisphosphonates as a second choice after comparing data about absolute fracture reduction, harms (toxicity and inconvenience of daily injections), and costs. Drs. Maricic, Deal, Dore, and Laster cite the randomized trial of alendronate versus teriparatide in glucocorticoid-treated patients that reported incident fractures as a secondary outcome. This trial found a lower risk of clinical vertebral fractures in the teriparatide compared to alendronate treated patients (0% vs. 2.4% [n=4/169], p=0.037) but no difference in the risk of nonvertebral fracture (7.5% vs. 7.0%, p=0.843) (1).

Sci Rep. 2017 Sep 22;7(1):12153. doi: 10.1038/s41598-017-12153-5.

Estrogenic vascular effects are diminished by chronological aging.

Nicholson CJ, Sweeney M, Robson SC, Taggart MJ.

The beneficial role of estrogen in the vascular system may be due, in part, through reduction of peripheral vascular resistance. The use of estrogen therapy to prevent cardiovascular disease in post-menopausal women remains contentious. This study investigated the influence of aging and the menopause on the acute vasodilatory effects of estrogen using ex vivo human and murine resistance arteries. Vessels were obtained from young (2.9 ± 0.1 months) and aged (24.2 ± 0.1 and 28.9 ± 0.3 months) female mice and pre- (42.3 ± 0.5 years) and post-menopausal (61.9 ± 0.9 years) women. Aging was associated with profound structural alterations of murine uterine arteries, including the occurrence of outward hypertrophic remodeling and increased stiffness. Endothelial and smooth muscle function were diminished in uterine (and tail) arteries from aged mice and post-menopausal women. The acute vasodilatory effects of 17β-estradiol (non-specific estrogen receptor (ER) agonist), PPT (ERα-specific agonist) and DPN (ERβ-specific agonist) on resistance arteries were attenuated by aging and the menopause. However, the impairment of estrogenic relaxation was evident after the occurrence of age-related endothelial dysfunction and diminished distensibility. The data indicate, therefore, that chronological resistance arterial aging is a prominent factor leading to weakened vasodilatory action of estrogenic compounds.

Cancer Epidemiol Biomarkers Prev. 2017 Sep 22. doi: 10.1158/1055-9965.EPI-17-0495. [Epub ahead of print]

Metabolic obesity phenotypes and risk of breast cancer in postmenopausal women.

Kabat GC, Kim MY, Lee JS, Ho GY, Going SB, Beebe-Dimmer J, Manson JE, Chlebowski RT, Rohan TE.

BACKGROUND: Obesity and the metabolic syndrome (MetS) have both been linked to increased risk of postmenopausal breast cancer; however, their relative contributions are poorly understood. METHODS: We examined the association of metabolic phenotypes of obesity defined by presence of the MetS (yes, no) and body mass index (normal, overweight, obese) with risk of postmenopausal breast cancer in a prospective analysis of a cohort of postmenopausal women (n ~ 21,000) with baseline measurements of blood glucose, triglycerides, HDL-cholesterol, blood pressure, waist circumference, and body mass index. Women were classified into 6 metabolic obesity phenotypes according to their body mass index (BMI: 18.5-<25.0, 25.0-<30.0, >30.0 kg/m2) and presence of the metabolic syndrome (>3 of the following: waist circumference >88 cm, triglycerides >150 mg/dl, HDL-C <50 mg/dl, glucose >100 mg/dl, and systolic/diastolic blood pressure >130/85 mmHg or treatment for hypertension). Hazard ratios (HR) for incident breast cancer and 95% confidence intervals (95% CI) were estimated using Cox proportional hazards models. RESULTS: Over 15 years of follow-up, 1,176 cases of invasive breast cancer were diagnosed. Obesity, regardless of metabolic health, was associated with increased risk of breast cancer. Being obese and metabolically unhealthy was associated with the highest risk: HR 1.62, 95% CI 1.33-1.96. These associations were stronger in women who had never used hormone therapy. CONCLUSIONS: Our findings suggest that both obesity and metabolic dysregulation are associated with breast cancer risk. IMPACT: Beyond BMI, metabolic health should be considered a clinically relevant and modifiable risk factor for breast cancer.

Clin Investig Arterioscler. 2017 Sep 19. doi: 10.1016/j.arteri.2017.07.006. [Epub ahead of print]

Association between endothelial dysfunction, epicardial fat and sub-clinical atherosclerosis during menopause.

Cabrera-Rego JO1, Navarro-Despaigne D, Staroushik-Morel L, Díaz-Reyes K, Lima-Martínez MM, Iacobellis G.

BACKGROUND: Menopausal transition is critical for the development of early, subclinical vascular damage. Multiple factors, such as atherosclerosis, increased epicardial fat, and endothelial dysfunction can play a role. Hence, the objective of this study was the comparison of epicardial adipose tissue and carotid intima media thickness in order to establish the best predictor of carotid stiffness in middle-aged women with endothelial dysfunction. METHODS: A total of 43 healthy women aged 40-59 years old with endothelial dysfunction previously demonstrated by flow mediated dilation were recruited to have anthropometric, biochemical, hormonal and ultrasound determinations of carotid intima media thickness and epicardial fat thickness. RESULTS: Carotid arterial stiffness parameters (local pulse wave velocity [4.7±0.7 vs 4.8±0.5 vs 5.6±0.5m/s, respectively, p<0.001], pressure strain elastic modulus [55.2±13.4 vs 59.2±11.8 vs 81.9±15.6kPa, respectively, p<0.001], arterial stiffness index β [4.4±1.4 vs 5.0±1.1 vs 6.4±1.3, respectively, p<0.001]) and epicardial fat thickness (2.98±1.4 vs 3.28±1.9 vs 4.70±1.0mm, respectively, p=0.007) showed a significant and proportional increase in the group of late post-menopausal women when compared to early post-menopausal and pre-menopausal groups, respectively. Among body fat markers, epicardial fat was the strongest predictor of local pulse wave velocity, independent of age. CONCLUSIONS: In menopausal women with endothelial dysfunction, menopausal transition is associated with increased carotid arterial stiffness and epicardial fat thickness, independent of age. Ultrasound measured epicardial fat was a better independent predictor of arterial stiffness than carotid intima media thickness in these women.

Am J Epidemiol. 2017 Sep 15;186(6):696-708. doi: 10.1093/aje/kwx131.

Hormone Therapy Use and Risk of Chronic Disease in the Nurses' Health Study: A Comparative Analysis With the Women's Health Initiative.

Bhupathiraju SN, Grodstein F, Rosner BA, Stampfer MJ, Hu FB, Willett WC, Manson JE.

Observational studies and randomized controlled trials of menopausal hormone therapy (HT) and chronic disease risk appear to have divergent results for cardiovascular disease. However, differences may be related to a modifying effect of age, time since menopause, and HT formulation. In the Nurses' Health Study (NHS) (enrolling during 1980-1994 and following participants until 2002), we investigated associations between the use of oral conjugated equine estrogens (CEE) (0.625 mg/day) plus medroxyprogesterone acetate (MPA) (<10 mg/day) or oral CEE alone and cardiovascular disease, cancer, all-cause mortality, and other major endpoints among postmenopausal women, aged 50-79 years at HT initiation. Among women aged 50-59 years at HT initiation, associations of CEE alone or CEE+MPA with most clinical outcomes were highly concordant between NHS and Women's Health Initiative (WHI). However, for myocardial infarction, results for CEE+MPA were in the direction of risk elevation in WHI and in the direction of risk reduction in NHS. When examined according to years since menopause onset (<10 years) rather than age group, results were nonsignificant and concordant for both studies. Because few women in the NHS initiated HT after age 60 years, we did not examine associations in this group. Discrepancies between NHS and WHI could largely be attributed to differences in the age structure of the populations and age at HT initiation.

Ann Surg. 2017 Sep 21. doi: 10.1097/SLA.0000000000002525. [Epub ahead of print]

Bariatric Surgery and the Risk of Cancer in a Large Multisite Cohort.

Schauer DP, Feigelson HS, Koebnick C, Caan B, Weinmann S, Leonard AC, Powers JD, Yenumula PR, Arterburn DE.

OBJECTIVE: To determine whether bariatric surgery is associated with a lower risk of cancer. BACKGROUND: Obesity is strongly associated with many types of cancer. Few studies have examined the relationship between bariatric surgery and cancer risk. METHODS: We conducted a retrospective cohort study of patients undergoing bariatric surgery between 2005 and 2012 with follow-up through 2014 using data from a large integrated health insurance and care delivery systems with 5 study sites. The study included 22,198 subjects who had bariatric surgery and 66,427 nonsurgical subjects matched on sex, age, study site, body mass index, and Elixhauser comorbidity index. Multivariable Cox proportional-hazards models were used to examine incident cancer up to 10 years after bariatric surgery compared to the matched nonsurgical patients. RESULTS: After a mean follow-up of 3.5 years, we identified 2543 incident cancers. Patients undergoing bariatric surgery had a 33% lower hazard of developing any cancer during follow-up [hazard ratio (HR) 0.67, 95% confidence interval (CI) 0.60, 0.74, P < 0.001) compared with matched patients with severe obesity who did not undergo bariatric surgery, and results were even stronger when the outcome was restricted to obesity-associated cancers (HR 0.59, 95% CI 0.51, 0.69, P < 0.001). Among the obesity-associated cancers, the risk of postmenopausal breast cancer (HR 0.58, 95% CI 0.44, 0.77, P < 0.001), colon cancer (HR 0.59, 95% CI 0.36, 0.97, P = 0.04), endometrial cancer (HR 0.50, 95% CI 0.37, 0.67, P < 0.001), and pancreatic cancer (HR 0.46, 95% CI 0.22, 0.97, P = 0.04) was each statistically significantly lower among those who had undergone bariatric surgery compared with matched nonsurgical patients. CONCLUSIONS: In this large, multisite

cohort of patients with severe obesity, bariatric surgery was associated with a lower risk of incident cancer, particularly obesity-associated cancers, such as postmenopausal breast cancer, endometrial cancer, and colon cancer. More research is needed to clarify the specific mechanisms through which bariatric surgery lowers cancer risk.

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The influence of unilateral oophorectomy on the age of menopause.

Rosendahl M, Simonsen MK, Kjer JJ.

OBJECTIVE: To determine the age of menopause after premenopausal unilateral oophorectomy (UO) and to establish whether UO at a young age leads to menopause at a younger age than if UO occurs at an older age. METHODS: A cohort of 28 731 women, of whom 17 781 (62%) were menopausal, was investigated. Information on menopause was obtained from self-reported questionnaires. Surgical data were obtained from the National Patient Register to avoid recollection bias. Age of menopause after UO/not UO was determined using Kaplan-Meier curves. Cox regression was used to identify factors of importance for early menopause. RESULTS: UO was performed in 1148 women. Women with UO after the age of 45 years, premenopausal hysterectomy, bilateral oophorectomy and cancer were excluded, leaving 236 in the analysis. Menopause occurred 1.8 years earlier after UO compared to women with two intact ovaries (mean 49.5 vs. 51.3 years), and younger age at UO was significantly linearly correlated to younger age at menopause. UO (hazard ratio 1.23) and smoking (hazard ratio 1.12) significantly decreased the age of menopause. CONCLUSIONS: Premenopausal unilateral oophorectomy significantly reduces the age of menopause by 1.8 years. Younger age at UO leads to significantly younger age at menopause.

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Association between obesity and sleep disorders in postmenopausal women.

Naufel MF, Frange C, Andersen ML, Girão MJBC, Tufik S, Beraldi Ribeiro E, Hachul H.

OBJECTIVE: To investigate the relationship between obesity and sleep architecture in postmenopausal women. METHODS: One hundred seven postmenopausal women from the Ambulatory of Integrative Treatment for Female Sleep Disorders were invited by telephone to participate in this study. Fifty-three completed the study. We included women aged 50 to 70 years, and excluded women on hormone therapy or missing data. The study consisted of two meetings, including a full-night polysomnography. Menopause status was confirmed by amenorrhea for at least 1 year. Anthropometric measurements included: body mass, height, body mass index (BMI), waist circumference, hip circumference, waist-to-hip ratio (WHR), and neck circumference. Participants were allocated into two groups according to BMI: nonobese group (BMI <30 kg/m) and obese group (BMI ≥30 kg/m). RESULTS: The obese group had significantly ($P<0.01$) increased values of BMI, neck circumference, waist circumference, and hip circumference. WHR was similar between the groups ($P=0.77$). Obese participants had significantly increased values of respiratory disturbance index (16.4 vs 9.3 n°/h) and apnea-hypopnea index (14.2 vs 5.6 n°/h). Rapid eye movement sleep latency was positively correlated to body mass ($r=P<0.01$), BMI ($P<0.01$), and hip circumference ($P=0.01$). WHR was negatively correlated to sleep efficiency ($P=0.03$). The linear regression model showed that BMI ($P<0.01$) and WHR ($P<0.01$) were positive predictors of rapid eye movement sleep latency. CONCLUSION: In postmenopausal women, high BMI and abdominal obesity are sources of sleep disturbances, decreasing deep sleep, and sleep efficiency, while increasing the risk of obstructive sleep apnea.