Selección de Resúmenes de Menopausia

Semana del 26 de Noviembre al 2 de Diciembre de 2014

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Mayo Clin Proc. 2014 Dec 3. pii: S0025-6196(14)00866-0. doi: 10.1016/j. [Epub ahead of print]

Burden of Illness for Osteoporotic Fractures Compared With Other Serious Diseases Among Postmenopausal Women in the United States.

Singer A, Exuzides A, Spangler L, O'Malley C, Colby C, Johnston K, Agodoa I, Baker J, Kagan R.

OBJECTIVES: To provide a national estimate of the incidence of hospitalizations due to osteoporotic fractures (OFs) in women; compare this with the incidence of myocardial infarction (MI), stroke, and breast cancer; and assess temporal trends in the incidence and length of hospitalizations. PATIENTS AND METHODS: The study included all women 55 years and older at the time of admission, admitted to a hospital participating in the US Nationwide Inpatient Sample for an outcome of interest. We performed a retrospective analysis of hospitalizations for OFs (hip, forearm, spine, pelvis, distal femur, wrist, and humerus), MI, stroke, or breast cancer, using the US Nationwide Inpatient Sample, 2000-2011. RESULTS: From 2000 to 2011, there were 4.9 million hospitalizations for OF, 2.9 million for MI, 3.0 million for stroke, and 0.7 million for breast cancer. Osteoporotic fractures accounted for more than 40% of the hospitalizations in these 4 outcomes, with an age-adjusted rate of 1124 admissions per 100,000 person-years. In comparison, MI, stroke, and breast cancer had age-adjusted incidence rates of 668, 687, and 151 admissions per 100,000 person-years, respectively. The annual total population facility-related hospital cost was highest for hospitalizations due to OFs ($5.1 billion), followed by MI ($4.3 billion), stroke ($3.0 billion), and breast cancer ($0.5 billion). CONCLUSION: These data provide evidence that in US women 55 years and older, the hospitalization burden of OFs and population facility-related hospital cost is greater than that of MI, stroke, or breast cancer. Prioritization of bone health and supporting programs such as fracture liaison services is needed to reduce this substantial burden.

Redox Biol. 2014;3C:88-99. doi: 10.1016/j.redox.2014.11.001. Epub 2014 Nov 15.

Estradiol improves cardiovascular function through up-regulation of SOD2 on vascular wall.

Liu Z, Gou Y, Zhang H, Zuo H, Zhang H, Liu Z, Yao D.

Epidemiological studies have shown that estrogens have protective effects in cardiovascular diseases, even though the results from human clinical trials remain controversial, while most of the animal experiments confirmed this effect, but the detailed mechanism remains unclear. In this study, we found that estradiol (E2) treatment significantly increases the expression of mitochondrial superoxide dismutase (SOD2) in mice and in vitro in human aorta endothelial cells. Further investigation shows that E2 up-regulates SOD2 through tethering of estrogen receptor (ER) to Sp1 and the increased binding of Sp1 to GC-box on the SOD2 promoter, where ERα responses E2-mediated gene activation, and ERβ maintains basal gene expression level. The E2/ER-mediated SOD2 up-regulation results in minimized ROS generation, which highly favors healthy cardiovascular function. Gene therapy through lentivirus-carried endothelium-specific delivery to the vascular wall in high-fat diet (HFT) mice shows that the SOD2 expression in endothelial cells normalizes E2 deficiency-induced ROS generation with ameliorated mitochondrial dysfunction and vascular damage, while SOD2 knockdown worsens the problem despite the presence of E2, indicating that E2-induced SOD2 expression plays an important vasculoprotective role. To our knowledge, this is the first report for the mechanism by which E2 improves cardiovascular function through up-regulation of SOD2 in endothelial cells. In turn, this suggests a novel gene therapy through lentivirus-carried gene delivery to vascular wall for E2 deficiency-induced cardiovascular damage in postmenopausal women.

Maturitas. 2014 Oct 23. pii: S0378-5122(14)00324-7. doi: 10.1016/j.maturitas. [Epub ahead of print]

Obesity and its relation to depressive symptoms and sedentary lifestyle in middle-aged women.

Blümel JE, Chedraui P, Aedo S, Fica J, Mezones-Holguín E, Barón G, Bencosme A, Benítez Z, Bravo LM, Calle A, Flores D, Espinoza MT, Gómez G, Hernández-Bueno JA, Laribezcoa F, Martino M, Lima S, Monterrosa A, Mostajo D, Ojeda E, Onatra W, Sánchez H, Tserotas K, Vallejo MS, Witis S, Zúñiga MC.

BACKGROUND: The prevalence of obesity increases during female mid-life and although many factors have been identified, data from Latin America is lacking. OBJECTIVE: To assess factors related to obesity among middle-aged women and determine the association with depressive symptoms, sedentary lifestyle and other factors. METHODS:A total of 6079 women aged 40-59 years of 11 Latin American countries were asked to fill out the Goldberg Anxiety and Depression Scale, the Menopause Rating Scale, the Athens Insomnia Scale, the Pittsburgh Sleep Quality Index and a general questionnaire containing personal socio-demographic data, anthropometric measures and lifestyle information. Obesity was defined as a body mass index (BMI) ≥30kg/m2. RESULTS: Obesity was observed in 18.5% and sedentary lifestyle in 63.9%. A 55.5% presented vasomotor symptoms, 12.2% had severe menopausal symptoms and 13.2% used hormone therapy for the menopause. Prevalence of depressive symptoms was 46.5% and anxiety 59.7%. Our logistic regression model found that significant factors associated to obesity included: arterial hypertension (OR: 1.87), depressive symptoms (OR: 1.57), sedentary lifestyle (OR: 1.50) diabetes mellitus (OR: 1.34), higher number of individuals living at home (OR: 1.31), sleep problems (OR:1.22), anxiety (OR: 1.21), having a stable partner (OR: 1.20), parity (OR: 1.16) and vasomotor symptoms (OR:1.14). A lower risk for obesity was found among women using hormonal contraceptives (OR: 0.69). CONCLUSION: Obesity in middle-aged women is the consequence of the interaction of multiple factors. It was associated to hypertension, depressive symptoms, sedentary lifestyle, climacteric symptoms and other factors.

Hum Reprod. 2014 Dec 1. pii: deu327. [Epub ahead of print]

Age at menopause in women with type 1 diabetes mellitus: the OVADIA study.

Yarde F, van der Schouw YT, de Valk HW, Franx A, Eijkemans MJ, Spiering W, Broekmans FJ; on behalf of the OVADIA study group.

STUDY QUESTION: Is type 1 diabetes a determinant of advanced ovarian ageing, resulting in an early age at natural menopause? SUMMARY ANSWER: No clear evidence was provided that type 1 diabetes is a determinant of accelerated ovarian ageing resulting in an early menopause. WHAT IS KNOWN ALREADY: The association between type 1 diabetes and early menopause has been examined previously with inconsistent results. STUDY DESIGN, SIZE, DURATION: A cross-sectional study was performed in 140 post-menopausal women with, and 5426 post-menopausal women without, diabetes. PARTICIPANTS/MATERIALS, SETTING, METHODS: Both women with and without diabetes had experienced natural menopause. Study participants filled out a standardized questionnaire including report of their age at last menstrual period. Differences in menopausal age were analysed using linear regression analyses, with adjustment for possible confounders. MAIN RESULTS AND THE ROLE OF CHANCE: Mean age at natural menopause was 49.8 ± 4.7 years in women with type 1 diabetes and 49.8 ± 4.1 in women without diabetes. Linear regression analyses showed that type 1 diabetes was not associated with an earlier menopause compared with the reference group without diabetes, after adjustment for age, smoking history and parity (difference in age at menopause between women with type 1 diabetes and reference group 0.34 years, 95% confidence interval -0.34, 1.01). LIMITATIONS, REASON FOR CAUTION: Age at menopause was self-reported and assessed retrospectively. We had no information regarding microvascular complications therefore a possible association between vascular health and menopausal age could not be investigated. WIDER IMPLICATIONS OF THE FINDINGS: It has been hypothesized that the possible mechanism behind an accelerated ovarian ageing process in type 1 diabetes is prolonged poor glycaemic control and subsequent effects on vascular health. The improved glycaemic control during the last decades may have prevented vascular damage from occurring to an extent that would affect organ function. Nevertheless, the present findings are reassuring for reproductive health prospects in women with type 1 diabetes.

Arch Med Res. 2014 Nov 1. pii: S0188-4409(14)00220-3. doi: 10.1016/j.arcmed. [Epub ahead of print]

Bisphosphonates May Protect against Bone Loss in Postmenopausal Women with Early Breast Cancer Receiving Adjuvant Aromatase Inhibitor Therapy: Results from a Meta-analysis.

Su G, Xiang Y, He G, Jiang C, Li C, Yan Z, Li Y.

BACKGROUND AND AIMS: The efficacy of bisphosphonates (BPs) in treating bone loss associated with cancer therapies has been demonstrated in completed studies and ongoing clinical trials. The aim of this study was to investigate the evidence for BP use in treatment of bone loss in postmenopausal, early breast cancer (EBC) patients scheduled to receive aromatase inhibitors (AI). METHODS: A comprehensive search for relative articles published until December 2013 was performed. The outcomes included the percentage and absolute change in lumbar spine (LS) and total hip (TH) bone mineral density (BMD). Before pooled meta-analysis, the studies were evaluated for publication bias and heterogeneity. Weighted mean differences (WMDs) and 95% confidence intervals (CIs) were calculated. We also performed subgroup and sensitivity analyses. RESULTS: A total of 11 trials contributed to the analysis. BP was shown to be efficacious in increasing BMD at the LS and TH. WMD in BMD absolute change was 0.21 g/cm2 (95% CI, 0.13-0.28) at the LS and 0.27 g/cm2 (95% CI, 0.02-0.12) at the TH. WMD in BMD percentage change was 5.42 (95% CI, 4.37-6.48) at the LS and 3.03 (95% CI, 2.01-4.01) at the TH. Subgroup analysis revealed that age difference, interventional duration, types of interventions and BP types were associated with variable effects on BMD at the LS and TH. CONCLUSIONS: BPs may protect against bone loss in postmenopausal women with EBC receiving adjuvant AI treatment.

Maturitas. 2014 Oct 2. pii: S0378-5122(14)00294-1. doi: 10.1016/j.maturitas.2014.09.007. [Epub ahead of print]

The impact of moderate wine consumption on health.

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Wine is a traditional beverage that has been associated with both healthy and harmful effects. Conceptions like the so-called "French paradox" or the beneficial impact of the Mediterranean diet suggest benefit. Wine has a complex composition, which is affected by whether it is red or white or by other variables, like the variety of grapes or others. Alcohol and phenolic compounds have been attributed a participation in the benefits ascribed to wine. The case of alcohol has been extensively studied, but the key question is whether wine offers additional benefits. Resveratrol, a non-flavonoid compound, and quercetin, a flavonol, have received particular attention. There is much experimental work confirming a beneficial balance for both substances, particularly resveratrol, in various organs and systems. The pharmacological dosages used in many of those experiments have shed doubt, however, on the clinical translation of those findings. Clinical studies are limited by their observational nature as well as for the difficulties to abstract the benefits of wine from other confounders. Notwithstanding the doubts, there is reasonable unanimity in beneficial effects of moderate wine consumption in cardiovascular disease, diabetes, osteoporosis, maybe neurological diseases, and longevity. Observations are less enthusiastic in what refers to cancer. While considering these limitations, clinicians may spread the message that the balance of moderate wine consumption seems beneficial.

Maturitas. 2014 Sep 30. pii: S0378-5122(14)00296-5. doi: 10.1016/j.maturitas.2014.09.009. [Epub ahead of print]

Physical activity and menopause-related quality of life - A population-based cross-sectional study.

Mansikkamäki K, Raitanen J, Malila N, Sarkeala T, Männistö S, Fredman J, Heinävaara S, Luoto R.

The aim of the research was to study the association between engagement in the recommended level of physical activity and quality of life (QoL) among middle-aged women. In total, 2606 Finnish women aged 49 years responded to a postal questionnaire on lifestyle, quality of life, and health, wherein QoL was assessed with a shorter version of the menopause-specific Women's Health Questionnaire (WHQ). Proportional odds ratios (PORs) from ordered logistic regression models were used to test the association between the physical-activity and WHQ domains or three quality-of-life variables. Physically inactive women had an increased probability of anxiety/depressed mood (POR 1.44; 95% confidence interval (CI) 1.26-1.65), of decreased well-being (POR 1.96; 95% CI 1.71-2.25), of somatic symptoms (POR 1.61; 95% CI 1.40-1.85), of memory/concentration problems (POR 1.48; 95% CI 1.29-1.70), and of vasomotor symptoms (POR 1.19; 95% CI 1.03-1.36) as compared to physically active women. Women with the recommended level of physical activity had a higher self-perceived health level, better relative health, and better global quality of life in relation to other women their age. Physically active women showed higher quality of life in four menopause-specific WHQ dimensions and in global quality of life when compared to inactive women.