



Selección de Resúmenes de Menopausia

Semana del 6 al 12 de Julio, 2016

Juan Enrique Blümel. Departamento Medicina Sur. Universidad de Chile

Fertil Steril. 2016 Jul 5. pii: S0015-0282(16)61352-3. doi: 10.1016/j.fertnstert.2016.06.023. [Epub ahead of print]

The effects of hormones on skin wrinkles and rigidity vary by race/ethnicity: four-year follow-up from the ancillary skin study of the Kronos Early Estrogen Prevention Study.

Owen CM, Pal L, Mumford S3, Freeman R, Isaac B, McDonald L, Santoro N, Taylor HS, Wolff EF.

OBJECTIVE: To measure skin wrinkles and rigidity in menopausal women of varying race/ethnicity with or without hormone therapy (HT) for up to four years. **DESIGN:** Randomized, double-blind, placebo-controlled trial. **SETTING:** Academic medical centers. **PATIENT(S):** Women (42-58 years of age) within 36 months of last menstrual period and enrolled in the Kronos Early Estrogen Prevention Study (KEEPS). **INTERVENTION(S):** Treatment with 0.45 mg oral conjugated equine estrogens (CEE), transdermal E2 (50 µg/d) with micronized P (200 mg daily), or placebo for 4 years. **MAIN OUTCOME MEASURE(S):** Skin wrinkles were assessed at 11 locations on the face and neck, and skin rigidity was assessed at the forehead and cheek at baseline and yearly for 4 years. **RESULT(S):** Neither total wrinkle score nor total rigidity score was significantly different at baseline or over the 4-year follow-up among patients randomized to CEE, E2, or placebo. Skin wrinkle and rigidity scores were primarily affected by race/ethnicity, with scores being significantly different between races for almost all of the wrinkle parameters and for all of the rigidity measures. There was no association between race and response to HT for total wrinkle or rigidity scores. Black women had the lowest wrinkle scores compared with white women across all 4 years. In general, skin rigidity decreased in all groups over time, but black women had significantly reduced total facial rigidity compared with white women after 4 years. **CONCLUSION(S):** Race is the strongest predictor of the advancement of skin aging in the 4 years following menopause. HT does not appear to affect skin wrinkles or rigidity at most facial locations.

Horm Metab Res. 2016 Jul 8. [Epub ahead of print]

Metabolism Regulation by Estrogens and Their Receptors in the Central Nervous System Before and After Menopause.

Coyoy A, Guerra-Araiza C, Camacho-Arroyo I.

Estrogens through their intracellular receptors regulate various aspects of glucose and lipid metabolism. The effects of estrogens in metabolism can be mediated by their receptors located in different areas of the brain such as the hypothalamus, which is involved in the control of food intake, energy expenditure, and body weight homeostasis. Alterations in the metabolic regulation by estrogens participate in the pathogenesis of the metabolic syndrome and cardiovascular diseases in women. The metabolic syndrome is an important disease around the world, consisting in a combination of characteristics including abdominal obesity, dyslipidemia, hypertension, and insulin resistance. It increases the risk of cardiovascular disease and type 2 diabetes. It has been suggested that there is an increase in the incidence of metabolic syndrome during menopause due to estrogens deficiency. Estrogens replacement improves insulin sensitivity and reduces the risk of diabetes in rats. In the brain, estrogens through the interaction with their receptors regulate the activity of neurons involved in energy homeostasis, including appetite and satiety. Thus, estradiol and their receptors in the hypothalamus play a key role in metabolic syndrome development during menopause.

Maturitas. 2016 Jun 16. doi: 10.1016/j.maturitas.2016.06.001. [Epub ahead of print]

Revised global consensus statement on menopausal hormone therapy.

de Villiers TJ, Hall JE, Pinkerton JV, Pérez SC, Rees M, Yang C, Pierroz DD.

The following Consensus Statement is endorsed by The International Menopause Society, The North American Menopause Society, The Endocrine Society, The European Menopause and Andropause Society, The Asia Pacific Menopause Federation, The International Osteoporosis Foundation and The Federation of Latin American Menopause Societies.

Se adjunta texto completo

Genet Epidemiol. 2016 Jul 5. doi: 10.1002/gepi.21991. [Epub ahead of print]

Obesity and associated lifestyles modify the effect of glucose metabolism-related genetic variants on impaired glucose homeostasis among postmenopausal women.

Jung SY, Sobel EM, Papp JC, Crandall CJ, Fu AN, Zhang ZF.

PURPOSE: Impaired glucose metabolism-related genetic variants likely interact with obesity-modifiable factors in response to glucose intolerance, yet their interconnected pathways have not been fully characterized. **METHODS:** With data from 1,027 postmenopausal participants of the Genomics and Randomized Trials Network study and 15 single-nucleotide polymorphisms (SNPs) associated with glucose homeostasis, we assessed whether obesity, physical activity, and high dietary fat intake interact with the SNP-glucose variations. We used regression analysis plus stratification and graphic approaches. **RESULTS:** Across carriers of the 15 SNPs, fasting levels of glucose, insulin, and homeostatic model assessment-insulin resistance (HOMA-IR) were higher in obese, inactive, and high fat-diet women than in their respective counterparts. Carriers within subgroups differently demonstrated the direction and/or magnitude of the variants' effect on glucose-relevant traits. Variants in GCKR, GCK, DGKB/TMEM195 (*P* for interactions = 0.02, 0.02, and 0.01), especially, showed interactions with obesity: obese, inactive, and high fat-diet women had greater increases in fasting glucose, insulin, and HOMA-IR levels. Obese carriers at TCF7L2 variant had greater increases in fasting glucose levels than nonobese carriers (*P* for interaction = 0.04), whereas active women had greater decreases in insulin and HOMA-IR levels than inactive women (*P* for interaction = 0.02 in both levels). **CONCLUSIONS:** Our data support the important role of obesity in modifying glucose homeostasis in response to glucose metabolism-relevant variants. These findings may inform research on the role of glucose homeostasis in the etiology of chronic disease and the development of intervention strategies to reduce risk in postmenopausal women.

J Am Geriatr Soc. 2016 Jul 5. doi: 10.1111/jgs.14222. [Epub ahead of print]

Compression of Morbidity Is Observed Across Cohorts with Exceptional Longevity.

Ismail K, Nussbaum L, Sebastiani P, Andersen S, Perls T, Barzilai N, Milman S.

OBJECTIVES: To determine, in a sample of Ashkenazi Jewish aged 95 and older, whether there is a compression of morbidity similar to what has been reported in other cohorts with exceptional longevity. **DESIGN:** Case-control study. **SETTING:** Longevity Genes Project (LGP) and New England Centenarian Study (NECS). **PARTICIPANTS:** LGP (*n* = 439, mean age 97.8 ± 2.8) and NECS (*n* = 1,498, mean age 101.4 ± 4.0) participants with exceptional longevity and their respective younger referent cohorts (LGP, *n* = 696; NECS, *n* = 302). **MEASUREMENTS:** Self- and proxy reports of age of onset of cancer, cardiovascular disease, diabetes mellitus, hypertension, osteoporosis, and stroke. **RESULTS:** Long-lived individuals from LGP and NECS had later age of onset of cancer, cardiovascular disease, diabetes mellitus, hypertension, and osteoporosis than their respective younger reference groups. The risk of overall morbidity was lower in participants with exceptional longevity than in younger participants (NECS men: relative risk (RR) = 0.12, women: RR = 0.20; LGP men: RR = 0.18, women: RR = 0.24). The age at which 20% of each of the groups with exceptional longevity experienced specific diseases was between 18 and 24 years later than in the reference groups, stratified according to sex. **CONCLUSION:** The similar extension of health span and compression of morbidity seen in NECS and LGP participants with exceptional longevity further validates the utility of these rare individuals for the study of factors that delay or prevent a broad spectrum of diseases otherwise associated with mortality and disability.

PD. Compresión de la morbilidad es el atraso de la aparición de enfermedades crónicas.

Hormones (Athens). 2016 Apr;15(2):205-23. doi: 10.14310/horm.2002.1674.

Vitamin D levels in a large Mediterranean cohort: reconsidering normal cut-off values.

Katrinaki M, Kampa M, Margioris A, Castanas E, Malliaraki N.

OBJECTIVE: The determination of the normal range of 25-hydroxyvitamin D [25-(OH)D], though currently based on suppression of PTH levels, still remains a controversial issue. The 25-(OH)D levels exhibit gender and seasonal variability, the latter attributed in part to changes of insolation. **DESIGN:** The aim of this cross-sectional study was to estimate the levels of 25-(OH)D on the island of Crete and their correlation with metabolic, hormonal and bone turnover parameters. The study was performed over a period of five years and involved 8,183 male and female individuals (8,042 analyzed). **RESULTS:** Our results are as follows: (1) 25-(OH)D was significantly lower than expected (19.48 ± 9.51 and

18.01±9.01 (ng/mL+SD) in males and females, respectively); (2) seasonal variation of 25-(OH)D was observed in both sexes (females < males), with values peaking in August; (3) a decline of 25-(OH)D was evident with advancing age, with lower levels in females compared to males up to menopause and no apparent difference between the genders thereafter; (4) levels of 25-(OH)D were lower in renal function impairment, diabetes/insulin resistance and inflammation, while no correlation was detectable in thyroid dysfunction; (5) normalization of PTH levels was observed at ~20 ng/mL 25-(OH)D. At the same cut-off level, a significant decrease of all measured bone turnover indices (b-ALP, osteocalcin and CTX) was evident. CONCLUSION: Based on the above data, it appears that a cut-off level of 25-(OH)D close to 20 ng/mL better reflects the physiology of our population.

Bone Rep. 2016 May 9;5:117-23. doi: 10.1016/j.bonr.2016.05.001. eCollection 2016.

Is bone equally responsive to calcium and vitamin D intake from food vs. supplements? Use of (41)calcium tracer kinetic model.

Rogers TS, Garrod MG, Peerson JM, Hillegonds DJ, Buchholz BA, Demmer E, Richardson C, Gertz ER, Van Loan

BACKGROUND: Few interventions directly compare equivalent calcium and vitamin D from dairy vs. supplements on the same bone outcomes. The radioisotope calcium-41 ((41)Ca) holds promise as a tracer method to directly measure changes in bone resorption with differing dietary interventions. OBJECTIVE: Using (41)Ca tracer methodology, determine if 4 servings/day of dairy foods results in greater (41)Ca retention than an equivalent amount of calcium and vitamin D from supplements. Secondary objective was to evaluate the time course for the change in (41)Ca retention. METHODS: In this crossover trial, postmenopausal women (n = 12) were dosed orally with 100 nCi of (41)Ca and after a 180 day equilibration period received dairy (4 servings/day of milk or yogurt; ~ 1300 mg calcium, 400 IU cholecalciferol (vitamin D3/day)) or supplement treatments (1200 mg calcium carbonate/day and 400 IU vitamin D3/day) in random order. Treatments lasted 6 weeks separated by a 6 week washout (WO). Calcium was extracted from weekly 24 h urine collections; accelerator mass spectrometry (AMS) was used to determine the (41/40)Ca ratio. Primary outcome was change in (41/40)Ca excretion. Secondary outcome was the time course for change in (41)Ca excretion during intervention and WO periods. RESULTS: The (41/40)Ca ratio decreased significantly over time during both treatments; there was no difference between treatments. Both treatments demonstrated a significant retention of (41)Ca within 1-2 weeks (p = 0.0007 and p < 0.001 for dairy and supplements, respectively). WO demonstrated a significant decrease (p = 0.0024) in (41)Ca retention within 1-2 weeks, back to pre-intervention levels. CONCLUSION: These data demonstrate that urinary (41)Ca retention is increased with an increase in calcium and vitamin D intake regardless of the source of calcium, and the increased retention occurs within 1-2 weeks.

Medscape. Society of Cardiovascular Computed Tomography 2016 Annual Scientific Meeting; June 23, 2016; Orlando, FL. Abstract 94.

Timing of hormone replacement therapy and coronary artery calcium progression: The Multi-Ethnic study of Atherosclerosis.

Nezarat N, Brumback L, Luo Y, et al.

A new analysis of asymptomatic postmenopausal women in the Multi-Ethnic Study of Atherosclerosis (MESA) shows that coronary artery calcium (CAC) increased in a linear fashion with each year of delay in starting hormone-replacement therapy (HRT) after menopause. In a prior study of the MESA population, the researchers showed that CAC progression on serial CT scans was associated with an increased risk of hard outcomes (MI or fatal CHD). MESA enrolled asymptomatic 45- to 84-year-old men and women at six centers across the US from 2000 to 2002 to examine risk factors that predict the progression of subclinical cardiovascular disease. The researchers analyzed 12-year data from 1358 postmenopausal women in MESA who were on HRT at study entry; they had a CT scan done then and at least one other CT scan 2 to 4 years later; some of the women had a subsequent scan. On average, the women were 63 years old at study entry (20% were 45 to 54; 36% were 55 to 64; 31% were 65 to 74; and 13% were 75 to 84). Half of the women were white (49%), and the others were black (25%), Hispanic (18%), or Chinese American (9%). They had a mean body-mass index (BMI) of 28, a mean LDL cholesterol of 114 mg/dL, and 43% were taking antihypertensives. On average, the women had entered menopause at age 47. They had started taking HRT, estrogen alone in 62% of cases, at age 52, and they took it for 8 years. At the start of the study, 581 women (43%) had some calcification in their coronary arteries, and they had a mean Agatston calcium score of 77. Over the 12-year follow-up, the women's Agatston coronary calcium scores increased, and, notably, for each year in delay in starting HRT, these scores increased significantly (P<0.001) whether or not they had calcium detected in their coronary arteries at the study outset. "This evidence suggests that if you start HRT earlier, it may help you have less coronary calcium, less atherosclerosis in the future," lead author Dr Negin Nezarat summarized a poster session at the Society of Cardiovascular Computed Tomography (SCCT) 2016 Annual Scientific Meeting.