Selección de Resúmenes de Menopausia

Semana del 28 de febrero al 6 de marzo de 2018

Juan Enrique Blümel. Departamento Medicina Sur. Universidad de Chile

J Basic Clin Physiol Pharmacol. 2018 Mar 28;29(2):123-129. doi: 10.1515/jbcpp-2017-0057.

Electrodermal response to auditory stimuli in relation to menopausal transition period.

Kishan A, Marakur N, Moodithaya S, Mirajkar AM.

Menopause-associated estrogen deficiency results in climacteric symptoms like vasomotor, psychological and sleep disturbances that cause a decline in the quality of life. Electrodermal activity (EDA), a psychophysiological measure, reflects sympathetic activity, which provides information associated with individual's emotions, phobias, arousal, cognition and stress. The study compared electrodermal response to auditory stimuli between postmenopausal and perimenopausal women with and without symptoms and also correlated the association of scores of the menopausal transition symptoms with indices of EDA. METHODS: Seventy-five women volunteers in the age group of 45-60 years, 25 in each group who were postmenopausal, perimenopausal with symptoms and perimenopausal without symptoms, were recruited. Indices of EDA such as latency, amplitude, rise time and half recovery time for auditory stimuli were quantified using standard techniques. Symptoms of menopausal transition were assessed using Women Health Questionnaire. RESULTS: Analysis using one-way analysis of covariance after controlling for variables showed that mean skin conductance level of EDA was significantly higher among perimenopausal women with symptoms compared with perimenopausal women without symptoms and postmenopausal women. Perimenopausal women with symptoms had significantly lower latency of response when compared with other groups. Analysis using Pearson correlation test showed that latency of EDA had significant positive correlation and amplitude had significant negative correlation with menopausal transition symptom scores. CONCLUSIONS: Perimenopausal women with symptoms exhibited increased sympathetic sudomotor activity when compared with perimenopausal women without symptoms and postmenopausal women as measured by EDA. Further, select measures of EDA exhibited significant association with the symptoms of menopausal transition.

BMJ Open. 2018 Mar 1;8(3):e015187. doi: 10.1136/bmjopen-2016-015187.

Combination therapy of anabolic agents and bisphosphonates on bone mineral density in patients with osteoporosis: a meta-analysis of randomised controlled trials.

Lou S, Lv H, Li Z, Zhang L, Tang P.

OBJECTIVE: We aimed to determine whether the concomitant combination therapy of anabolic agents and bisphosphonates produces more effects on bone mineral density (BMD) than anabolic agents alone in patients with osteoporosis. METHODS: We searched MEDLINE, EMBASE and the Cochrane Library for publications from 1 January 1980 to 1 August 2016 to identify all the randomised controlled trials (RCTs) and quasi-RCTs. The primary outcome was the mean per cent changes in BMD at the lumbar spine, the total hip and the femoral neck with an optimal period of treatment (6 to 12 months). The secondary outcome was the mean per cent changes in BMD at the same sites with the full period of recommendation (18 to 24 months). A random-effects model was used to estimate the standardised mean differences (SMDs) and the 95% CIs. RESULTS: Seven studies, with 747 patients, were included. With the optimal period, the concomitant combination therapy demonstrated a significant advantage over a monotherapy in BMD improvement at the total hip (SMD 0.42; 95% CI 0.26 to 0.58) and the femoral neck (SMD 0.30; 95% CI 0.14 to 0.46), but not for the spine BMD (SMD 0.13; 95% CI -0.17 to 0.43). With the full period, the concomitant combination therapy did not improve the BMD at the lumbar spine (SMD -0.06; 95% CI -0.71 to 0.59), the total hip (SMD 0.05; 95% CI -0.71 to 0.82) and the femoral neck (SMD -0.32; 95% CI -1.15 to 0.50). CONCLUSIONS: Compared with anabolic monotherapy, the concomitant combination therapy of anabolic agents and bisphosphonates significantly improved the BMD at the total hip and femoral neck with a shorter term (6 to 12 months) and produced similar benefits on BMD for the longer term (18 to 24 months). Also, the effect of concomitant combination therapy might be affected by the dose of anabolic agents.

Nutrients. 2018 Feb 27;10(3). pii: E272. doi: 10.3390/nu10030272.

Vitamin D and Calcium Addition during Denosumab Therapy over a Period of Four Years Significantly Improves Lumbar Bone Mineral Density in Japanese Osteoporosis Patients.

Suzuki T, Nakamura Y, Kato H.

This study investigated whether or not vitamin D and calcium supplementation affected bone metabolism and bone mineral density (BMD) over a period of four years of denosumab therapy in patients with primary osteoporosis. Patients were divided into a denosumab monotherapy group (22 cases) or a denosumab plus vitamin D and calcium supplementation group (combination group, 21 cases). We measured serum bone alkaline phosphatase (BAP), tartrate-resistant acid phosphatase (TRACP)-5b, urinary N-terminal telopeptide of type-I collagen (NTX), and BMD of the lumbar 1-4 vertebrae (L-BMD) and bilateral hips (H-BMD) at baseline and at 12, 24, 36, and 48 months of treatment. There were no significant differences in patient background. Serum BAP, TRACP-5b, and urinary NTX were significantly and comparably inhibited in both groups from 12 to 48 months versus baseline values. L-BMD was significantly increased at every time point in both groups, while H-BMD was significantly increased at every time point in the combination group only. There were significant differences between the groups for L-BMD at 24, 36, and 48 months ($P < 0.05$) and for H-BMD at 12 months ($P < 0.05$). Compared with denosumab monotherapy, combination therapy of denosumab plus vitamin D and calcium significantly increased H-BMD at 12 months and L-BMD from 24 to 48 months. These findings indicate that continuous vitamin D and calcium supplementation is important, especially for 12 months to improve H-BMD and from 24 to 48 months to improve L-BMD.

Nutr J. 2018 Feb 28;17(1):36. doi: 10.1186/s12937-018-0324-3.

Vegetarian-style dietary pattern during adolescence has long-term positive impact on bone from adolescence to young adulthood: a longitudinal study.

Movassagh EZ, Baxter-Jones ADG, Kontulainen S, Whiting S, Szafron M, Vatanparast H.

BACKGROUND: The amount of bone accrued during adolescence is an important determinant of later osteoporosis risk. Little is known about the influence of dietary patterns (DPs) on the bone during adolescence and their potential long-term implications into adulthood. We examined the role of adolescent DPs on adolescent and young adult bone and change in DPs from adolescence to young adulthood. METHODS: We recruited participants from the Saskatchewan Pediatric Bone Mineral Accrual Study (1991-2011). Data from 125 participants (53 females) for adolescent analysis (age 12.7 ± 2 years) and 115 participants (51 females) for adult analysis (age 28.2 ± 3 years) were included. Bone mineral content (BMC) and areal bone mineral density (aBMD) of total body (TB), femoral neck (FN) and lumbar spine (LS) were measured using dual-energy X-ray absorptiometry. Adolescent dietary intake data from multiple 24-h recalls were summarized into 25 food group intakes and were used in the principal component analysis to derive DPs during adolescence. Associations between adolescent DPs and adolescent or adult BMC/BMD were analyzed using multiple linear regression and multivariate analysis of covariance while adjusting for sex, age, the age of peak height velocity, height, weight, physical activity and total energy intake. Generalized estimating equations were used for tracking DPs. RESULTS: We derived five DPs including "Vegetarian-style", "Western-like", "High-fat, high-protein", "Mixed" and "Snack" DPs. The "Vegetarian-style" DP was a positive independent predictor of adolescent TBBMC, and adult TBBMC, TBaBMD ($P < 0.05$). Mean adolescent TBaBMD and young adult TBBMC, TBaBMD, FNBMC and FNaBMD were 5%, 8.5%, 6%, 10.6% and 9% higher, respectively, in third quartile of "Vegetarian-style" DP compared to first quartile ($P < 0.05$). We found a moderate tracking (0.47-0.63, $P < 0.001$) in DP scores at individual levels from adolescence to adulthood. There were an upward trend in adherence to "Vegetarian-style" DP and an downward trend in adherence to "High-fat, high-protein" DP from adolescence to young adulthood ($P < 0.01$). CONCLUSION: A "Vegetarian-style" DP rich in dark green vegetables, eggs, non-refined grains, 100% fruit juice, legumes/nuts/seeds, added fats, fruits and low-fat milk during adolescence is positively associated with bone health.

Climacteric. 2018 Mar 1:1-6. doi: 10.1080/13697137.2018.1433656. [Epub ahead of print]

The role of transvaginal ultrasound in screening for ovarian cancer.

Campbell S, Gentry-Maharaj A.

Ovarian cancer is a low-prevalence postmenopausal cancer with a high mortality rate and is the fifth most lethal cancer in women. The most common serous subtype with TP53 mutations spreads rapidly throughout the peritoneal

cavity (stage III/IV) when 5-year survival is 10%. If diagnosed while confined to the ovary (stage I), the survival rate exceeds 90%. This is the rationale for screening. Annual transvaginal ultrasound (TVU) scans used as a primary screening modality or as a second-line test following primary screening with serum CA125 (multimodal) have been investigated in several trials. Only two large randomized controlled trials have provided mortality data. The US Prostate, Lung, Colorectal and Ovarian Cancer Screening Trial studied over 78 000 women (randomized to screening with either TVU or CA125, or control) over 6 years with 14 years follow-up and found no mortality benefit from screening and increased morbidity in the screened arm. The UK Collaborative Trial of Ovarian Cancer Screening studied over 202 000 women randomized to TVU, multimodal or control in a 1 : 1 : 2 ratio over 7-11 years with 11 years follow-up. CA125 was interpreted by the Risk of Ovarian Cancer algorithm which identifies a rise in the level rather than a fixed cut-off. There was a late reduction in mortality after 7 years in the screened arm (23% in the multimodal arm and 21% in the TVU arm), but the overall reduction was not significant. Further follow-up may reveal whether TVU has a primary or secondary role in ovarian cancer screening.

Aging Clin Exp Res. 2018 Feb 27. doi: 10.1007/s40520-018-0921-1. [Epub ahead of print]

The combination of vitamin D deficiency and overweight affects muscle mass and function in older post-menopausal women.

Gimigliano F, Moretti A, de Sire A, Calafiore D, Iolascon G.

BACKGROUND: It has been suggested that overweight and obese individuals have an increased risk to develop vitamin D deficiency, commonly associated with poor muscle performance. The relationship among fat mass, vitamin D status, and skeletal muscle is still debated. AIMS: To evaluate the effects of the combination of hypovitaminosis D and overweight on muscle mass and strength, and physical performance in post-menopausal women. METHODS: In this cross-sectional study, we recruited post-menopausal women referring to a physiatric outpatient service for the management of osteoporosis over a 36-month period. We compared four groups: (1) normal weight with hypovitaminosis D; (2) overweight with normal serum 25(OH)D3; (3) overweight with hypovitaminosis D; and (4) normal weight with normal serum 25(OH)D3 (control group). Outcome measures were: appendicular lean mass-to-BMI ratio; hand grip strength; and short physical performance battery. RESULTS: We analysed 368 women (mean aged 67.2 ± 7.8 years): 95 normal weight with hypovitaminosis D, 90 overweight with normal levels of 25(OH)D3, 96 overweight with hypovitaminosis D, and 87 normal weight with normal levels of 25(OH)D3. Overweight women with hypovitaminosis D had a significant risk of reduced muscle mass (OR 5.70; $p < 0.001$), strength (OR 12.05; $p < 0.001$), and performance (OR 5.84; $p < 0.001$) compared to controls. Normal weight women with hypovitaminosis D had only a greater risk of an impairment of muscle strength (OR 7.30; $p < 0.001$) and performance (OR 3.16; $p < 0.001$). DISCUSSION: According to our findings, both hypovitaminosis D and overweight should be investigated in post-menopausal women because of their negative effects on skeletal muscle mass and function. CONCLUSIONS: This study demonstrated that hypovitaminosis D is associated to impaired muscle function and its combination with overweight might lead also to muscle wasting in a cohort of post-menopausal women.

Int J Cardiol. 2018 Feb 21. pii: S0167-5273(17)37792-6. doi: 10.1016/j.ijcard.2018.02.065. [Epub ahead of print]

Age at menopause, extent of coronary artery disease and outcome among postmenopausal women with acute coronary syndromes.

Savonitto S, Morici N, Franco N, Misuraca L, Lenatti L, Ferri LA, Lo Jacono E, et al; LADIES ACS Investigators.

BACKGROUND: Early menopause has been associated with increased cardiovascular mortality, but prospective studies investigating outcomes of postmenopausal women with acute coronary syndromes (ACS) in relation to menopausal age are lacking. METHODS: We analyzed the 1-year outcome of 373 women with acute myocardial infarction enrolled in the Ladies ACS study. All patients underwent coronary angiography, with corelab analysis. Menopause questionnaires were administered during admission. Menopausal age below the median of the study population (50 years) was defined as "early menopause". The composite 1-year outcome included all-cause mortality, recurrent myocardial infarction and stroke. RESULTS: The mean age at index ACS was 73 years (IQR 65-83) for women with early menopause, and 74 (IQR 65-80) for those with late menopause. Patients with early menopause had more prevalent chronic kidney disease (12.8% vs 5.9%, $p = 0.03$), whereas there were no differences in all other clinical characteristics, extent of coronary disease at angiography (as assessed by Gensini and SYNTAX scores), as

well as interventional treatments. Within 1 year, women with late menopause had significantly better outcome as compared with those with early menopause (6.5% vs 15.3%, p = 0.007). At logistic regression analysis, late menopause was independently associated with better outcome (OR 0.28; 95% CI 0.12-0.67; p = 0.004). With each year's delay in the menopause the adjusted risk decreased by 12% (OR 0.88, 0.77-0.99, p = 0.040). CONCLUSION: Despite comparable clinical and angiographic characteristics, women with late menopausal age experience better outcomes after an ACS as compared with those with early menopause.

Cancer Prev Res (Phila). 2018 Feb 26. pii: canprevres.0347.2017. doi: 10.1158/1940-6207. [Epub ahead of print]

The combined association of modifiable risk factors with breast cancer risk in the Women's Health Initiative.

Arthur R, Wassertheil-Smoller S, Manson JE, Luo J, Snetselaar L, Hastert T, Caan B, Qi L, Rohan T.

Although several modifiable risk factors have been independently associated with risk of breast cancer, few studies have investigated their joint association with breast cancer risk. Using a healthy lifestyle index (HLI) score, we assessed the association of a combination of selected modifiable risk factors (diet, alcohol, physical activity, BMI and smoking) with risk of invasive breast cancer in the Women's Health Initiative (WHI). This study comprised 131,833 postmenopausal women, of whom 8168 had breast cancer, who were enrolled in the WHI Observational Study or the WHI clinical trials. Cox proportional hazards regression was used to estimate the hazard ratios (HR) and 95% confidence intervals (CI) for the association of the score with the risk of developing breast cancer overall and according to specific breast cancer clinicopathological characteristics. There was a 4% reduction in the risk of breast cancer per unit increase in the HLI score. Compared to those with an HLI score in the lowest quintile level, those in the highest quintile level had 30%, 37%, and 30% lower risk for overall, ER+/PR+, and HER2+ breast cancer, respectively (HR: 0.70; 95% CI: 0.64-0.76; 0.63, 0.57-0.69; and 0.70; 0.55-0.90, respectively). We also observed inverse associations between the score and risk of breast cancer irrespective of nodal status, tumor grade, and stage of the disease. Most individual lifestyle factors were independently associated with the risk of breast cancer. Our findings support the view that promoting healthy lifestyle practices may be beneficial with respect to lowering risk of breast cancer among postmenopausal women.