Selección de Resúmenes de Menopausia

Semana del 21 al 27 de Octubre 2015

Juan Enrique Blümel. Departamento Medicina Sur. Universidad de Chile

Jpn J Clin Oncol. 2015 Oct 21. pii: hyv150. [Epub ahead of print]

The association between overweight, obesity and ovarian cancer: a meta-analysis.

Liu Z, Zhang TT, Zhao J1, Qi SF, Du P, Liu DW, Tian QB.

OBJECTIVE: Epidemiological studies have reported an inconsistent association between obesity and ovarian cancer. To update the current knowledge of and further qualify the association between overweight, obesity and ovarian cancer risk, we conducted a meta-analysis of published observational studies. METHODS: Using the PubMed, MEDLINE and EMBASE databases, we performed a literature search of all of the case-control and cohort studies published as original articles in English before March 2015. We included 26 observational studies, of which 13 were case-control studies (7782 cases and 21 854 controls) and 13 were cohort studies (5181 cases). Fixed- and random-effects models were used to compute summary estimates and the corresponding 95% confidence intervals. Subgroup analyses were also performed. RESULTS: The pooled relative risk for overweight and obesity compared with normal weight (body mass index = 18.5-24.9 kg/m2) was 1.07 (95% confidence interval: 1.02-1.12) and 1.28 (95% confidence interval: 1.16-1.41), respectively. In subgroup analyses, we found that overweight/obesity increased the risk of ovarian cancer in most groups, except for the postmenopausal group (overweight: pooled relative risk = 0.97, 95% confidence interval: 0.76-1.24; obesity: pooled relative risk = 0.93, 95% confidence interval: 0.61-1.42). There was no evidence of publication bias. CONCLUSIONS: Increased body weight was associated with an increased risk of ovarian cancer; in particular, severe obesity demonstrated a stronger risk effect. No statistically significant association was observed in the postmenopausal period, but was in the premenopausal period.

J Bone Joint Surg Am. 2015 Oct 21;97(20):1685-93. doi: 10.2106/JBJS.O.00313.

25-Hydroxyvitamin-D and Bone Turnover Marker Levels in Patients with Distal Radial Fracture.

Rozental TD, Herder LM, Walley K1, Zurakowski D, Coyle K, Bouxsein ML, Wolf JM.

BACKGROUND: Fragility fractures are a major public health issue with substantial socioeconomic cost. Vitamin-D deficiency and increased bone turnover are associated with higher rates of bone loss and an increased risk of fracture. We hypothesized that patients with a distal radial fracture would have lower levels of 25-hydroxyvitamin D (25[OH]D) and increased levels of serum bone turnover markers than controls without a fracture. METHODS: Postmenopausal women with a recent distal radial fracture (fracture group, n = 105) were prospectively recruited and were compared with individuals without a fracture (control group, n = 150). Outcome variables included serum levels of 25(OH)D and markers of bone formation, including N-terminal extension propeptide of type-I collagen (P1NP), parathyroid hormone (PTH), bone-specific alkaline phosphatase (BSAP), and osteocalcin, as well as a marker of resorption (C-terminal telopeptide of type-I collagen [CTX-1]). Bone mineral density was measured with dual x-ray absorptiometry. RESULTS: The fracture group was slightly older than the control group (mean and standard deviation [SD], 66.8 ± 10.8 years versus 63.3 ± 9.0 years, p = 0.008), had a lower body mass index (26.4 ± 5.9 kg/m(2) versus 28.0 ± 6.2 kg/m(2), p = 0.05), and more commonly had had a prior fracture (52% versus 31%, p < 0.001). Bone mineral density at the hip was lower in the fracture group than in the control group (0.831 ± 0.130 g/cm(2) versus 0.917 ± 0.139 g/cm(2), p < 0.001). The mean 25(OH)D levels were similar in the fracture and control groups (44.4 ± 14.6 ng/mL versus 41.3 ± 14.5 ng/mL, p = 0.08). Levels of serum markers of bone formation were significantly higher in the fracture group than in the control group (P1NP: 70.4 ± 33.2 ng/mL versus 53.2 ± 25.6 ng/mL, p < 0.001; osteocalcin: 22.3 ± 9.9 ng/mL versus 20.2 ± 9.2 ng/mL, p = 0.017). Levels of BSAP, PTH, and CTX-1 were similar in the two groups. Multivariable logistic regression showed independent associations between a distal radial fracture and low total hip bone mineral density (odds ratio [OR] = 2.02 for each decrease of 1 SD, 95% confidence interval [CI] = 1.38 to 3.01, p < 0.001) and a high P1NP level (OR = 2.17 for each 1-SD increase, 95% CI = 1.52 to 3.06, p < 0.001). CONCLUSIONS: In this cohort, 25(OH)D levels were not associated with distal radial fracture and do not appear to affect the risk assessment for distal radial fracture in postmenopausal women. Patients with a distal radial fracture, however, had increased bone turnover as evidenced by high P1NP and osteocalcin levels. Women with both a high P1NP level and low bone mineral

density were at particularly high risk for fracture. LEVEL OF EVIDENCE: Prognostic Level III. See Instructions for Authors for a complete description of levels of evidence.

Am J Physiol Regul Integr Comp Physiol. 2015 Oct 21.doi: 10.1152/ajpregu.00170.2015. [Epub ahead of print]

Ang ii-induced hypertension in the vcd mouse model of menopause is prevented by estrogen replacement during perimenopause.

Pollow DP Jr, Romero-Aleshire MJ, Sanchez JN, Konhilas JP, Brooks HL.

Premenopausal females are resistant to the genesis development of hypertension, and this protection is lost following the onset of menopause, resulting in a sharp increase in disease onset and severity. However, it is unknown how a fluctuating ovarian hormone environment during the transition from perimenopause to menopause impacts the onset of hypertension, and whether interventions during perimenopause prevent disease onset after menopause. A gradual transition to menopause was induced by repeated daily injections of 4-vinylcyclohexene diepoxide (VCD). Ang II (800 ng/kg/min) was infused into peri- and menopausal female mice for 14 days. A separate cohort of mice received 17-β estradiol replacement during perimenopause. Ang II-infusion produced significantly higher systolic blood mean arterial pressures (MAP) (SBP) in menopausal vs. cycling females and 17-β estradiol replacement prevented this increase. In contrast, MAP was not significantly different when Ang II was infused into perimenopausal and cycling females, suggesting that female resistance to Ang II-induced hypertension is intact during perimenopause. Similar to studies in male mice, Ang II-infusion caused a significant glomerular hypertrophy and hypertrophy was not impacted by hormonal status. Expression levels of aquaporin-2, a collecting duct protein have been suggested to reflect blood pressure. AQP2 protein expression was significantly down regulated in the renal cortex of the Ang II-infused menopause group, where blood pressure was increased. AQP2 expression levels were restored to control levels with 17-β estradiol replacement. This study indicates that the changing hormonal environment in the VCD model of menopause impacts the severity of Ang II-induced hypertension. These data highlight the utility of the ovary-intact VCD model of menopause as a clinically relevant model to investigate the physiological mechanisms of hypertension that occur in women during the transition into menopause.

Climacteric. 2015 Oct 21:1-8. [Epub ahead of print]

FRAX and fracture prediction without bone mineral density.

Kanis JA, Harvey NC, Johansson H, Odén A, Leslie WD, McCloskey EV.

The major application of FRAX in osteoporosis is to direct pharmacological interventions to those at high risk of fracture. Whereas the efficacy of osteoporosis treatment, with the possible exception of alendronate, is largely independent of baseline bone mineral density (BMD), it remains a widely held perception that osteoporosis therapies are only effective in the presence of low BMD. Thus, the use of FRAX in the absence of BMD to identify individuals requiring therapy remains the subject of some debate and is the focus of this review. The clinical risk factors used in FRAX have high evidence-based validity to identify a risk responsive to intervention. The selection of high-risk individuals with FRAX, without knowledge of BMD, preferentially selects for low BMD and thus identifies a risk that is responsive to pharmacological intervention. The prediction of fractures with the use of clinical risk factors alone in FRAX is comparable to the use of BMD alone to predict fractures and is suitable, therefore, in the many countries where facilities for BMD testing are sparse. In countries where access to BMD is greater, FRAX can be used without BMD in the majority of cases and BMD tests reserved for those close to a probability-based intervention threshold. Thus concerns surrounding the use of FRAX in clinical practice without information on BMD are largely misplaced.

Rev Saude Publica. 2015;49:1-8. doi: 10.1590/S0034-8910.2015049005650. Epub 2015 Oct 20.

Burden of physical inactivity and hospitalization costs due to chronic diseases.

Bielemann RM, Silva BG, Coll Cde V, Xavier MO, Silva SG.

OBJECTIVE To evaluate the physical inactivity-related inpatient costs of chronic non-communicable diseases.METHODS This study used data from 2013, from Brazilian Unified Health System, regarding inpatient numbers and costs due to malignant colon and breast neoplasms, cerebrovascular diseases, ischemic heart diseases, hypertension, diabetes, and osteoporosis. In order to calculate the share physical inactivity represents in that, the physical inactivity-related risks, which apply to each disease, were considered, and physical inactivity prevalence during leisure activities was obtained from Pesquisa Nacional por Amostra de Domicílio (Brazil's National Household Sample Survey). The analysis was stratified by genders and residing country regions of subjects who were 40 years or older. The physical inactivity-related hospitalization cost regarding each cause was multiplied by the respective share it

regarded to.RESULTS In 2013, 974,641 patients were admitted due to seven different causes in Brazil, which represented a high cost. South region was found to have the highest patient admission rate in most studied causes. The highest prevalences for physical inactivity were observed in North and Northeast regions. The highest inactivity-related share in men was found for osteoporosis in all regions (≈ 35.0%), whereas diabetes was found to have a higher share regarding inactivity in women (33.0% to 37.0% variation in the regions). Ischemic heart diseases accounted for the highest total costs that could be linked to physical inactivity in all regions and for both genders, being followed by cerebrovascular diseases. Approximately 15.0% of inpatient costs from Brazilian Unified Health System were connected to physical inactivity.CONCLUSIONS Physical inactivity significantly impacts the number of patient admissions due to the evaluated causes and through their resulting costs, with different genders and country regions representing different shares.

Vnitr Lek. 2015 Fall;61(10):873-6.

Subclinical thyroid disease.

Zamrazil V.

Importance of subclinical thyroid disease (STh) is now a matter of discussion. Definition of this unit is laboratory: in presence of normal level of thyroxine (T4) TSH value is changed: in lower TSH level the subclinical hyperthyroidism (STx) in increase TSH levels subclinical hypothyroidism (SH) is present. Risk of clinical manifestation is twoo three times highter in comparison with persons with normal TSH level. Clinical importance STh is still not evaluated definitively. SH caused disturbance of lipid metabolism, elasticity of vessels and endothelial function and therefore increases risk of atherosclerosis. STx causes electrical instability of myocardium with increased risk of arythmias, increases risk of osteoporosis and other changes. Most important are effects of STh in cardiology, reproductive medicine and gynecology. Clinical significance of these effects is not definitively evaluated.

Drug Saf. 2015 Oct 19. [Epub ahead of print]

Testosterone Replacement Therapy and Mortality in Older Men.

Hackett GI.

While US testosterone prescriptions have tripled in the last decade with lower trends in Europe, debate continues over the risks, benefits and appropriate use of testosterone replacement therapy (TRT). Several authors blame advertising and the availability of more convenient formulations, whilst others have pointed out that the routine testing of men with erectile dysfunction (ED) (a significant marker of cardiovascular risk) and those with diabetes would inevitably increase the diagnosis of hypogonadism and lead to an increase in totally appropriate prescribing. They commented that this was merely an appropriate correction of previous under-diagnosis and under-treatment in line with evidence based guidelines. It is unlikely that persuasive advertising or convenient formulations could grow a market over such a sustained period if the treatment was not effective. Urologists and primary care physicians are the most frequent initiators of TRT usually for ED. Benefits are clearly established for sexual function, increase in lean muscle mass and strength, mood and cognitive function, with a possible reduction in frailty and osteoporosis. There remains no evidence that TRT is associated with increased risk of prostate cancer or symptomatic benign prostatic hyperplasia, yet the decision to initiate and continue therapy is often decided by urologists. The cardiovascular issues associated with TRT have been clarified by recent studies showing that therapy associated with clear increases in serum testosterone levels to the normal range is associated with reduced all-cause mortality. Studies reporting to show increased risk have been subject to flawed designs with inadequate baseline diagnosis and follow-up testing. Effectively, they have compared non-treated patients with under-treated or non-compliant subjects involving a range of different therapy regimes. Recent evidence suggests long-acting injections may be associated with decreased cardiovascular risk, but the transdermal route may be associated with potentially relatively greater risk because of conversion to dihydrotestosterone by the effect of 5-alpha reductase in skin. The multiple effects of TRT may add up to a considerable benefit to the patient that might be underestimated by the physician primarily concerned with his own specialty. In a response to concerns about the possible risks associated with inappropriate prescribing expressed by Public Citizen, the Food and Drug Administration (FDA) published a complete refutation of all the concerns, only to issue a subsequent bulletin of concern over inappropriate use, whilst confirming the benefits in treating men with established testosterone deficiency. No additional evidence was provided for this apparent change of opinion, but longer term safety data on testosterone products were strongly suggested. In contrast, the European Medicines Agency (EMA), in November 2014, concluded that "there is no consistent evidence of increased cardiovascular risk with testosterone products".