



## Selección de Resúmenes de Menopausia

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**Osteoporos Int. 2016 Feb 5. [Epub ahead of print]**

### **Abdominal obesity and hip fracture: results from the Nurses' Health Study and the Health Professionals Follow-up Study.**

Meyer HE, Willett WC, Flint AJ, Feskanich D.

Abdominal obesity might increase fracture risk. We studied the prospective associations between waist circumference, waist-to-hip ratio, and hip fracture. The indicators of abdominal obesity were associated with increased hip fracture risk in women, but not in men. The increased risk was restricted to women with low physical activity. **INTRODUCTION:** Low weight is an established risk factor for osteoporosis and hip fracture. However, the association between fat tissue, muscle, and bone is complex, and abdominal obesity might increase fracture risk. We studied the prospective associations between indicators of abdominal obesity and hip fracture in two large US cohorts. **METHODS:** At baseline in 1986 and through biennial follow-up, information on hip fracture and potential risk factors was collected in 61,677 postmenopausal women and 35,488 men above age 50. Waist and hip circumferences were reported at baseline and updated twice. **RESULTS:** During follow-up, 1168 women and 483 men sustained a hip fracture. After controlling for known risk factors, there was a significant association in women between increasing waist circumference and hip fracture (RR per 10-cm increase 1.13 (95 % CI 1.04-1.23) and between increasing waist-to-hip ratio and hip fracture (RR per 0.1 unit increase 1.14 (95 % CI 1.04-1.23), but these associations were not seen in men. In women, both measures interacted with physical activity. Those in the highest ( $\geq 0.90$ ) versus lowest ( $< 0.75$ ) category of waist-to-hip ratio had increased risk of hip fracture if their activity was less than the population median (RR = 1.61, 95 % CI 1.18-2.19) but not if their activity was higher (RR = 1.00, 95 % CI 0.72-1.40). A similar pattern was found for waist circumference. **CONCLUSION:** Indicators of abdominal obesity were associated with increased hip fracture risk after controlling for BMI in women. The increased risk was restricted to women with low physical activity. In men, no significant associations were found.

**Prz Menopauzalny. 2015 Dec;14(4):238-42. doi: 10.5114/pm.2015.56312. Epub 2015 Dec 8.**

### **Ovarian function and ovarian blood supply following premenopausal abdominal hysterectomy.**

Abdelazim IA, Abdelrazak KM, Elbiaa AA, Farghali MM, Essam A, Zhurabekova G.

**INTRODUCTION:** The issue of conserving the ovaries at hysterectomy in premenopausal women with benign gynecologic disease has been the subject of considerable controversy. Some clinicians prefer prophylactic oophorectomy in premenopausal women during hysterectomy to prevent future development of malignant changes in conserved ovaries. Other clinicians prefer to conserve apparently normal ovaries, because bilateral oophorectomy in premenopausal women results in an abrupt imbalance, sudden onset of menopausal symptoms, decreased libido, increased cardiovascular risk and osteoporosis. **MATERIAL AND METHODS:** Two hundred and twenty multipara women (who had completed their families), with benign uterine pathology were included in this prospective study for abdominal hysterectomy with bilateral ovarian preservation. Pre-operative vaginal ultrasound, Doppler studies, diagnostic hysteroscopy and endometrial biopsy were done followed by laboratory studies including Anti-mullerian hormone (AMH), follicle stimulating hormone (FSH) and estradiol for all studied women. Doppler studies, AMH, FSH and estradiol were repeated 6 and 12 months post-operative for assessment of the ovarian function and ovarian blood supply after hysterectomy. **RESULTS:** Pre-operative AMH, FSH and estradiol of the studied women were statistically insignificant compared to AMH, FSH and estradiol 6 and 12 months post-operative. Twelve months post-operative right and left ovarian volumes ( $6.92 \pm 0.18$  and  $6.85 \pm 0.19$  cm<sup>3</sup>, respectively) were significantly larger than pre-operative right and left ovarian volumes ( $6.19 \pm 0.22$  and  $5.86 \pm 0.23$  cm<sup>3</sup>, respectively), and, 12 months post-operative right and left ovarian pulsatility indices ( $2.92 \pm 0.15$  and  $2.96 \pm 0.16$  cm/s, respectively) were significantly lower than pre-operative right and left ovarian pulsatility indices ( $3.45 \pm 0.19$  and  $3.36 \pm 0.2$  cm/s, respectively). Eight (3.6%) cases of the studied women developed an ovarian cyst 6 months after hysterectomy, 3 were spontaneously resolved and the remaining 5 (2.27%) cases underwent exploratory laparotomy. **CONCLUSIONS:** There is no evidence of ovarian dysfunction affecting conserved ovaries one year after hysterectomy in premenopausal women as evident by AMH, FSH and estradiol. Furthermore, an increased ovarian volume and reduced ovarian pulsatility indices indicate a possible increase in ovarian blood supply, and preserved non-compromised ovarian function.

**J Am Coll Cardiol. 2016 Feb 9;67(5):545-57. doi: 10.1016/j.jacc.2015.12.005.**

## **Testosterone and Cardiovascular Disease.**

Kloner RA, Carson C, Dobs A, Kopecky S, Mohler ER.

Testosterone (T) is the principal male sex hormone. As men age, T levels typically fall. Symptoms of low T include decreased libido, vasomotor instability, and decreased bone mineral density. Other symptoms may include depression, fatigue, erectile dysfunction, and reduced muscle strength/mass. Epidemiology studies show that low levels of T are associated with more atherosclerosis, coronary artery disease, and cardiovascular events. However, treating hypogonadism in the aging male has resulted in discrepant results in regard to its effect on cardiovascular events. Emerging studies suggest that T may have a future role in treating heart failure, angina, and myocardial ischemia. A large, prospective, long-term study of T replacement, with a primary endpoint of a composite of adverse cardiovascular events including myocardial infarction, stroke, and/or cardiovascular death, is needed. The Food and Drug Administration recently put additional restrictions on T replacement therapy labeling and called for additional studies to determine its cardiac safety.

**Osteoporos Int. 2016 Feb 4. [Epub ahead of print]**

## **The predicted lifetime costs and health consequences of calcium and vitamin D supplementation for fracture prevention-the impact of cardiovascular effects.**

Hagen G, Wisløff T, Kristiansen IS.

Some studies indicate that calcium supplementation increases cardiovascular risk. We assessed whether such effects could counterbalance the fracture benefits from supplementation. Accounting for cardiovascular outcomes, calcium may cause net harm and would not be cost-effective. Clinicians may do well considering cardiovascular effects when prescribing calcium supplementation. **INTRODUCTION:** Accounting for possible cardiovascular effect of calcium and vitamin D supplementation (CaD), the aims of this study were to assess whether CaD on balance would improve population health and to evaluate the cost-effectiveness of such supplementation. **METHODS:** We created a probabilistic Markov simulation model that was analysed at the individual patient level. We analysed 65-year-old Norwegian women with a 2.3 % 10-year risk of hip fracture and a 9.3 % risk of any major fracture according to the WHO fracture risk assessment tool (FRAX®). Consistent with a recent Cochrane review, we assumed that CaD reduces the risk of hip, vertebral, and wrist fractures by 16, 11, and 5 %, respectively. We included the increased risk of acute myocardial infarction (AMI) and stroke under a no-, medium-, and high-risk scenario. **RESULTS:** Assuming no cardiovascular effects, CaD supplementation produces improved health outcomes resulting in an incremental gain of 0.0223 quality-adjusted life years (QALYs) and increases costs by €322 compared with no treatment (cost-effectiveness ratio €14,453 per QALY gained). Assuming a Norwegian cost-effectiveness threshold of €60,000 per QALY, CaD is likely to be considered a cost-effective treatment alternative. In a scenario with a medium or high increased risk of cardiovascular events, CaD produces net health losses, respectively, -0.0572 and -0.0784 QALY at additional costs of €481 and €1033. **CONCLUSIONS:** We conclude that the magnitude of potential cardiovascular side effects is crucial for the effectiveness and cost-effectiveness of CaD supplementation in elderly women.

**Am J Clin Oncol. 2016 Feb 2. [Epub ahead of print]**

## **Is Hormone Replacement Therapy Safe in Women With a BRCA Mutation?: A Systematic Review of the Contemporary Literature.**

Birrer N, Chinchilla C, Del Carmen M, Dizon DS.

**OBJECTIVES:** Women with a BRCA1 or BRCA2 mutation are recommended to undergo prophylactic (or risk reducing) bilateral salpingo-oophorectomy (BSO) before age 40, resulting in surgical menopause. Given the concerns of estrogen deprivation on overall health, hormone therapy (HT) is often discussed, yet safety concerns persist. **MATERIALS AND METHODS:** We performed a systematic literature review of the safety of HT in women with a BRCA mutation undergoing prophylactic BSO. **RESULTS:** Although there remains a paucity of data on this topic, as evidenced by this systematic review of the contemporary literature, these patients do benefit from treatment, especially as it relates to menopausal symptoms without an apparently increased risk of breast cancer. **CONCLUSIONS:** Decisions regarding the use of HT in women who undergo BSO after detection of a BRCA mutation must be individualized based on careful consideration of the risks and benefits. However, the risks of a subsequent cancer diagnosis appear small, particularly in regards to the benefits of treatment afforded by HT.

**Cereb Cortex. 2016 Feb 1. pii: bhw008. [Epub ahead of print]**

## **Caloric Restriction in Older Adults-Differential Effects of Weight Loss and Reduced Weight on Brain Structure and Function.**

Prehn K, Jumpertz von Schwartzberg R, Mai K, Zeitz U, Witte AV, Hampel D, et al.

Dietary modifications such as caloric restriction (CR) have been suggested as a means to improve memory and prevent age-related decline. However, it is unclear whether those effects remain stable over time or are related specifically to negative energy balance during the weight loss phase of CR. Using a randomized interventional design, we investigated changes in recognition memory and neural correlates in postmenopausal obese women (n = 19): 1) after intense weight loss in the course of a 12-week low-caloric diet (reduced body weight and negative energy balance) and 2) after having sustained the reduced weight over 4 more weeks (reduced body weight, but energy balance equilibrium). Participants were contrasted to a control group (n = 18) instructed not to change dietary habits. In the CR group, we found improved recognition memory, paralleled by increased gray matter volume in inferior frontal gyrus and hippocampus, and augmented hippocampal resting-state functional connectivity to parietal areas. Moreover, effects were specific for transient negative energy balance and could not be detected after subsequent weight maintenance. Our data demonstrate for the first time in humans that beneficial effects of CR on brain structure and function are due to weight loss rather than an overall reduced weight.

**Int J Cancer. 2016 Feb 2. doi: 10.1002/ijc.30024. [Epub ahead of print]**

## **Reproductive factors, hormone use and gastric cancer risk: The Singapore Chinese Health Study.**

Wang Z, Butler LM, Wu AH, Koh WP, Jin A, Wang R, Yuan JM.

Gastric cancer incidence varies greatly worldwide, but is consistently twice as high in men than in women. The hormone-related factors hypothesized to be associated with lower risk of gastric cancer in women have not been fully explored in populations with a high background risk of gastric cancer. The Singapore Chinese Health Study (SCHS) is a prospective cohort study in which 34,022 of the participants enrolled between 1993 and 1998 were women between 45 and 74 years of age. Information on reproductive histories, hormone replacement therapy (HRT), and oral contraceptive (OC) use were collected through in-person interviews at baseline. As of December 31, 2013, 269 incident gastric cancer cases were identified. Multivariable-adjusted hazard ratios (HRs) and 95% confidence intervals (CIs) were calculated to evaluate gastric cancer risk associations. Older age at natural menopause ( $\geq 55$  versus  $< 45$  years: HR=0.50, 95% CI: 0.25-0.99), type of menopause (other versus natural: HR=0.48, 95% CI: 0.27-0.87), and greater years of menstrual cycling (fourth versus first quartile: HR=0.67, 95% CI: 0.46-0.96) were associated with a decreased risk of gastric cancer. Ever use of OCs and HRT were also associated with reduced risk of gastric cancer; the multivariable-adjusted HRs (95% CIs) were 0.40 (0.17-0.90) for use of HRT  $> 3$  years and 0.67 (0.47-0.94) for ever use of OCs, compared with never use. Reproductive factors associated with a longer window of fertility and the use of exogenous hormones were shown to reduce gastric cancer development in a cohort of Chinese women with a high background risk of gastric cancer.

**Am J Obstet Gynecol. 2016 Jan 29. pii: S0002-9378(16)00225-8. [Epub ahead of print]**

## **Obesity and endometrial hyperplasia and cancer in premenopausal women: a systematic review.**

Wise MR, Jordan V, Lagas A, Showell M, Wong N, Lensen S, Farquhar CM.

**OBJECTIVE:** To systematically review the literature on the association between obesity and endometrial hyperplasia or cancer in premenopausal women. **DATA SOURCES:** We searched the bibliographic databases MEDLINE, EMBASE, PubMed and CINAHL (inception to May 5, 2015), and checked reference lists of included studies and systematic reviews. **STUDY ELIGIBILITY CRITERIA:** Studies of more than 50 women with endometrial pathology diagnosed during pre-menopause that reported on obesity as a risk factor. **STUDY APPRAISAL AND SYNTHESIS METHODS:** Study identification and data extraction were independently performed by two authors. Where possible, data were pooled in a generic inverse variance Forest plot. Heterogeneity was reported using the I<sup>2</sup> statistic. **RESULTS:** Nine case-control studies of moderate quality were included. Quantitative analysis of five studies showed a dose-response relationship of body mass index and increased risk of endometrial cancer. For studies of women with body mass index  $\geq 25$  the pooled odds ratio was 3.85 (95% confidence intervals 2.53-5.84); body mass index  $\geq 30$  was 5.25 (4.00-6.90); and body mass index  $\geq 40$  was 19.79 (11.18-35.03). **CONCLUSIONS:** Body mass index is a consistent and leading risk factor for endometrial complex hyperplasia or cancer in premenopausal women. Body mass index should be considered when deciding to assess the endometrium in symptomatic premenopausal women.