



## Selección de Resúmenes de Menopausia

Semana del 7 al 13 de Enero de 2015

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### The relationship between education level and mammographic density.

Sung J, Song Y.

To further understand the factors that contribute to interindividual variation in mammographic density, we evaluated the relationship between education level and each component of the mammographic density measures. Study participants included 535 women between 40 and 65 years of age who received a mammogram for a population-based twin and family study. Mammographic density was measured from digital mammograms using a computer-assisted thresholding method. To avoid negative confounding by obesity level, we calculated BMI-adjusted mammographic measures. Thereafter, each of the mammographic density measures was t-transformed using its mean value and SD for each age strata. The level of education was chosen as a marker representing socioeconomic status at the individual level. A linear mixed model considering familial correlations was used for analyses. In the unadjusted analysis for all women, the BMI-adjusted nondense area gradually decreased with an increase in education level ( $P$  for trend=0.017). This association persisted after adjusting for menstrual and reproductive factors. When we repeated the analysis according to menopausal status, an inverse association between education level and nondense area was evident in premenopausal women, whereas the inverse association attenuated to a statistically insignificant level after adjusting for menstrual and reproductive factors in postmenopausal women. Absolute dense area and percentage dense area were not associated with education level. The significant association between nondense area and education level after eliminating the effect of age and BMI suggests that socioeconomic factors may have an influential role in determining the amount of fat tissue in the breast.

**Obstet Gynecol. 2015 Jan 7. [Epub ahead of print]**

### Female Sexual Dysfunction: Focus on Low Desire.

Kingsberg SA, Woodard T.

Low or absent sexual desire is the most common sexual dysfunction in women, and its prevalence peaks during midlife. Its etiology is complex and may include biologic, psychologic, and social elements. Major risk factors for its development include poor health status, depression, certain medications, dissatisfaction with partner relationship, and history of physical abuse, sexual abuse, or both. Diagnosis is based on criteria set by the Diagnostic and Statistical Manual of Mental Disorders (5th Edition) and requires that a woman experience personal distress. Clinical evaluation should include medical history, sexual history, and, sometimes, a physical examination. Laboratory data are of limited value, except when warranted by history or physical examination. Treatment options include nonpharmacologic interventions such as education, office-based counseling, and psychotherapy. Although there are no U.S. Food and Drug Administration (FDA)-approved treatments for low desire, pharmacologic agents have been used off-label for this purpose. Bupropion is an antidepressant that has been shown to improve desire in some women with and without depression. Systemic estrogen therapy is not recommended in the absence of vasomotor symptoms and is not directly associated with desire. However, vaginal estrogen is useful in patients presenting with concomitant vaginal atrophy and dyspareunia. Ospemifene is a selective estrogen receptor modulator that can be used as an alternative to vaginal estrogen. Exogenous testosterone has demonstrated efficacy in treating loss of desire in postmenopausal women. However, patients should be counseled that it is not FDA-approved for this purpose and there are limited published long-term safety data. Several agents for the treatment of low desire are currently in development. Gynecologists are in a unique position to address concerns about sexual desire in women.

**Chonnam Med J. 2014 Dec;50(3):75-81. doi: 10.4068/cmj.2014.50.3.75. Epub 2014 Dec 17.**

### HDL-Associated Paraoxonase 1 as a Bridge between Postmenopausal Osteoporosis and Cardiovascular Disease.

Eren E, Ellidag HY, Aydin O, Yılmaz N.

The association of postmenopausal osteoporosis (PMOP) with both atherosclerosis and vascular/valvular calcification is well known. Recently, ample evidence has suggested a common etiologic factor, namely, reduced HDL-associated paraoxonase 1 (PON1) activity, as a causative factor in the development of PMOP and cardiovascular disease (CVD). This common etiologic factor not only contributes to atherosclerotic diseases but also to PMOP following an almost identical mechanism including dysfunctional HDL and lipid oxidation. According to recent studies, lipid oxidation might improve

osteoblastic transformation of vascular cells and obstruct such transformation in bone cells. The primary objective of this current review was to summarize the evidence revealing the role of HDL-associated PON1 enzyme in PMOP.

*Nota del Editor: La Paraoxonase-1 (PON1) hidroliza los lipoperóxidos, disminuyendo la aterosclerosis.*

**Med Arch. 2014 Oct;68(5):335-8. doi: 10.5455/medarh.2014.68.335-338. Epub 2014 Oct 15.**

### **Incidence of osteoporosis in patients with urolithiasis.**

Bijelic R1, Milicevic S2, Balaban J3.

Clinical researches have shown an increased bone disintegration and lower bone mass in patients with calcium urolithiasis.

**GOAL:** The goal of our research was to establish the incidence of osteoporosis in adult patients with calcium urolithiasis, on the basis of measuring mineral bone density, using DEXA method, with a special reflection on age subgroups.

**MATERIAL AND METHODS:** Clinical research was prospective and it was implemented at the University Clinical Center of Banja Luka, at the Clinic for Endocrinology, Diabetes and Metabolic Diseases and at the Urology Clinic. Material in this research consisted of patients divided in two groups, a working and a control group. One hundred and twenty (120) patients were included in both these groups, divided in three age subgroups: 20-40, 40-60 and over 60. The working group consisted of the patients with calcium urolithiasis and the control group consisted of patients without calcium urolithiasis. Establishing of mineral bone density at L2-L4 of lumbal spine vertebrae and hip was done for the patients in both these groups, using DEXA method. **RESULTS:** Analysis of mineral bone density using DEXA method in patients in age groups of working and control groups, as well as in the total sample of working and control groups, have shown that the patients of the working group, over 60, had a decreased mineral bone density (30% of osteopenia and 15% osteoporosis) significantly more expressed when compared to the other two age groups (12.5% in the subgroup 20-40 and 17.5% in the subgroup 40-60), which presents a statistically significant difference ( $p < 0.05$ ). In the control group, when taking into account age groups, osteopenia and osteoporosis were marked in 37.5% and 2.5% in the group of patients over 60, whereas in the youngest population, 5% of osteopenia was found, which presents a statistically significant difference ( $p < 0.05$ ). When observing the total sample of working and control group, there was a statistically significant difference in the working and control group ( $p < 0.01$ ); incidence of osteoporosis in the working group amounted to 7.5% and in the control group it was 0.8%. **CONCLUSION:** Urolithiasis and osteoporosis are two multifactorial diseases which are evidently reciprocal. This is why we suggest that educating the population about the risk factors for occurrence of these diseases as well as preventive measures that may contribute to their decrease should begin as early as possible.

**Bone Joint J. 2015 Jan;97-B(1):89-93. doi: 10.1302/0301-620X.97B1.34558.**

### **The prevalence of vitamin D deficiency in patients with vertebral fragility fractures.**

Maier GS, Seeger JB, Horas K, Roth KE, Kurth AA, Maus U.

Hypovitaminosis D has been identified as a common risk factor for fragility fractures and poor fracture healing. Epidemiological data on vitamin D deficiency have been gathered in various populations, but the association between vertebral fragility fractures and hypovitaminosis D, especially in males, remains unclear. The purpose of this study was to evaluate serum levels of 25-hydroxyvitamin D (25-OH D) in patients presenting with vertebral fragility fractures and to determine whether patients with a vertebral fracture were at greater risk of hypovitaminosis D than a control population. Furthermore, we studied the seasonal variations in the serum vitamin D levels of tested patients in order to clarify the relationship between other known risk factors for osteoporosis and vitamin D levels. We measured the serum 25-OH D levels of 246 patients admitted with vertebral fractures (105 men, 141 female, mean age 69 years, sd 8.5), and in 392 orthopaedic patients with back pain and no fractures (219 men, 173 female, mean age 63 years, sd 11) to evaluate the prevalence of vitamin D insufficiency. Statistical analysis found a significant difference in vitamin D levels between patients with vertebral fragility fracture and the control group ( $p = 0.036$ ). In addition, there was a significant main effect of the tested variables: obesity ( $p < 0.001$ ), nicotine abuse ( $p = 0.002$ ) and diabetes mellitus ( $p < 0.001$ ). No statistical difference was found between vitamin D levels and gender ( $p = 0.34$ ). Vitamin D insufficiency was shown to be a risk factor for vertebral fragility fractures in both men and women

**Steroids. 2014 Dec 30. pii: S0039-128X(14)00306-7. doi: 10.1016/j.steroids.2014.12.013. [Epub ahead of print]**

### **Endogenous estrogens and the risk of breast, endometrial, and ovarian cancers.**

Brown SB1, Hankinson SE2.

Data from laboratory and epidemiologic studies support a relationship between endogenous hormones and the increased risk of several female cancers. In epidemiologic studies, consistent associations have been observed between risk of breast, ovarian and endometrial cancers and reproductive and hormonal risk factors such as high postmenopausal body mass index

(BMI) and postmenopausal hormone use, which suggest the importance of endogenous hormones in the etiology of these diseases. The relationship between circulating estrogen levels in postmenopausal women and the risk of breast cancer is well established, with an approximately 2-fold higher risk among women in the top 20-25% (versus bottom 20-25%) of levels. However, data evaluating the relationship between endogenous estrogens and premenopausal breast cancer risk are more limited and less consistent. Two studies to date have evaluated the relationship between circulating estrogens and breast cancer risk by menstrual cycle phase at blood collection and only one study has examined this relationship by menopausal status at diagnosis. Three prospective studies have evaluated circulating estrogen levels and endometrial cancer risk in postmenopausal women, with consistent strong positive associations reported (with relative risks of 2-4 comparing high versus low hormone levels), while this relationship has not been studied in premenopausal women. Compared to breast and endometrial cancers, reproductive and hormonal characteristics such as postmenopausal hormone use are generally weaker and less consistent risk factors for ovarian cancer, and the only small prospective study conducted to date indicated a non-significant positive relationship between circulating estrogen levels and ovarian cancer risk. In this review, we summarize current evidence and identify key areas to be addressed in future epidemiologic studies of endogenous estrogens and the risk of breast, endometrial, and ovarian cancers.

**Breast Cancer Res. 2015 Jan 8;17(1):1. [Epub ahead of print]**

### **The use of the Gail model, body mass index and SNPs to predict breast cancer among women with abnormal (BI-RADS 4) mammograms.**

McCarthy A, Keller B, Kontos D, Boghossian L, McGuire E, Bristol M, Chen J, Domchek S, Armstrong K.

**Introduction.** Mammography screening results in a significant number of false-positives. The use of pre-test breast cancer risk factors to guide follow-up of abnormal mammograms could improve the positive predictive value of screening. We evaluated the use of the Gail model, body mass index (BMI), and genetic markers to predict cancer diagnosis among women with abnormal mammograms. We also examined the extent to which pre-test risk factors could reclassify women without cancer below the biopsy threshold. **Methods.** We recruited a prospective cohort of women referred to biopsy with abnormal (BI-RADS 4) mammograms. Breast cancer risk factors were assessed prior to biopsy. A validated panel of 12 single nucleotide polymorphisms (SNPs) associated with breast cancer were measured. Logistic regression was used to assess the association of Gail risk factors, BMI and SNPs with cancer diagnosis (invasive or DCIS). Model discrimination was assessed using area under the receiver operating curve and calibration was assessed using the Hosmer-Lemeshow goodness of fit test. Finally, the distribution of predicted probabilities of cancer diagnosis were compared for women with and without breast cancer. **Results.** In the multivariate model, age (OR=1.05, 95% CI 1.03 to 1.08 P <0.001), SNP panel relative risk (OR=2.30, 95% CI 1.06 to 4.99, P=0.035), and BMI >30 kg/m<sup>2</sup> versus <25 kg/m<sup>2</sup>, OR=2.20, 95% CI 1.05 to 4.58, P=<0.036) were significantly associated with breast cancer diagnosis. Older women were more likely to be diagnosed with breast cancer. The SNP Panel RR remained strongly associated with breast cancer diagnosis after multivariable adjustment. Higher BMI was also strongly associated with increased odds of breast cancer diagnosis. Obese women (OR=2.20, 95% CI 1.05 to 4.58, P=0.036) had more than twice the odds of cancer diagnosis compared to women with BMI <25 kg/m<sup>2</sup>. The SNP Panel appeared to have predictive ability among both white and black women. **Conclusions.** Breast cancer risk factors, including BMI and genetic markers are predictive of cancer diagnosis among women with BI-RADS 4 mammograms. Using pre-test risk factors to guide follow-up of abnormal mammograms could reduce the burden of false-positive mammograms.