



## Selección de Resúmenes de Menopausia

Semanas del 4 al 10 de Junio de 2014

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**Gynecol Endocrinol. 2014 Jun 6:1-5. [Epub ahead of print]**

### Effectiveness, tolerability and acceptance of an oral estradiol/levonorgestrel formulation for the treatment of menopausal complaints: a non-interventional observational study over six cycles of 28 days.

Rouskova D1, Mittmann K, Schumacher U, Dietrich H, Zimmermann T.

**Abstract Background:** Use of hormone therapy for menopausal complaints is a subject of controversy and increased uncertainty and concerns. This non-interventional study aimed to investigate a marketed oral formulation containing 1 mg estradiol and 0.04 mg levonorgestrel for continuous treatment of menopausal symptoms for approximately 6 months in women visiting gynecological practices in Germany. **Methods:** Changes in the menopause rating scale (MRS) total and sub-domain scores after three and six 28-d cycles served as primary endpoint. Skin- and hair-related complaints, quality of sexual life and subjective satisfaction with the treatment were assessed. Adverse drug reactions (ADRs), adverse events (AEs) and vaginal bleeding were evaluated. **Results:** MRS scores improved significantly above 5 points of clinical relevance as compared to baseline (n = 736, p < 0.0001). Skin- and hair-related symptoms abated; quality of sexual life improved. AEs were registered in 9.9% of the participants. No unexpected ADRs were reported. Bleeding episodes consistently decreased; >75% of the subjects were amenorrheic throughout the study. Medication's effectiveness and tolerability was rated very good/good by >80% of the participants, who also continued treatment. **Conclusion:** This estradiol/low-dose levonorgestrel formulation safely alleviates menopausal symptoms in peri- and postmenopausal women with add-on benefits regarding dermatological and sexual life complaints.

**J Alzheimers Dis. 2014 Jun 4. [Epub ahead of print]**

### Oophorectomy, Hysterectomy, and Risk of Alzheimer's Disease: A Nationwide Case-Control Study.

Imtiaz B, Tuppurainen M, Tiihonen M, Kivipelto M, Soininen H, Hartikainen S, Tolppanen AM.

**Background:** Association between oophorectomy and/or hysterectomy and dementia in context of hormone therapy (HT) use is ambiguous. **Objective:** To assess whether oophorectomy, hysterectomy, and hysterectomy with bilateral oophorectomy are related to risk of Alzheimer's disease (AD), whether the possible indication for surgery plays a role, and if the associations are modified by HT. **Methods:** Our nationwide register based case-control (1 : 1) study included all women with clinically-verified AD diagnoses, residing in Finland on December 31, 2005 (n of cases = 19,043, n of controls = 19,043). AD cases, diagnosed according to NINCS-ADRDA and the DSM-IV criteria, were identified from Special Reimbursement Register. Information on HT use was collected from national prescription register, and data on surgery and uterine/ovarian/cervical cancer were obtained from the hospital discharge register. Most of the women (91.8%) were over 51 years of age when the surgery was performed. **Results:** Oophorectomy, hysterectomy, and hysterectomy with bilateral oophorectomy were associated with lower risk of AD (OR/95% CI: 0.85/0.75-0.97, 0.89/0.81-0.97 and 0.85/0.75-0.98, respectively) among women without the history of uterine/ovarian/cervical cancer, although the absolute risk difference was small. The association was not evident in women with uterine/ovarian/cervical cancer history (3.00 /0.20-44.87 for all surgeries). The associations were not modified by HT use, which was independently associated with AD risk, with longer use showing protective association. **Conclusion:** Our findings indicate that oophorectomy with or without hysterectomy after commencement of natural menopause is not an important determinant of AD risk in older age and support the critical window hypothesis for HT use.

**Am J Clin Nutr. 2014 Jun 4. pii: ajcn.071621. [Epub ahead of print]**

### Vegetarian diets and bone status.

Tucker KL.

Osteoporosis is a common chronic condition associated with progressive loss of bone mineral density (BMD) and compromised bone strength, with increasing risk of fracture over time. Vegetarian diets have been shown to contain lower amounts of calcium, vitamin D, vitamin B-12, protein, and n-3 ( $\omega$ -3) fatty acids, all of which have important roles

in maintaining bone health. Although zinc intakes are not necessarily lower quantitatively, they are considerably less bioavailable in vegetarian diets, which suggests the need for even higher intakes to maintain adequate status. At the same time, healthy vegetarian diets tend to contain more of several protective nutrients, including magnesium, potassium, vitamin K, and antioxidant and anti-inflammatory phytonutrients. On balance, there is evidence that vegetarians, and particularly vegans, may be at greater risk of lower BMD and fracture. Attention to potential shortfall nutrients through the careful selection of foods or fortified foods or the use of supplements can help ensure healthy bone status to reduce fracture risk in individuals who adhere to vegetarian diets.

**JAMA Psychiatry. 2014 Jun 4. doi: 10.1001/jamapsychiatry.2014.250. [Epub ahead of print]**

### **Greater Monoamine Oxidase A Binding in Perimenopausal Age as Measured With Carbon 11-Labeled Harmine Positron Emission Tomography.**

Rekkas PV1, Wilson AA1, Lee VW1, Yogalingam P1, Sacher J2, Rusjan P1, Houle S1, Stewart DE3, Kolla NJ1, et al  
**IMPORTANCE** Perimenopause is a period of high risk for mood disorders, and it has been proposed that perimenopause is also a window of risk for processes linked to later dementia. However, in human perimenopause, the neurobiological changes implicated in the genesis of mood disorders or dementia have not been identified. Monoamine oxidase A (MAO-A) is an important brain enzyme that creates oxidative stress, influences apoptosis, and metabolizes monoamines. After declines in estrogen level, MAO-A density may be elevated for a month or longer, and repeated declines in estrogen level occur with greater magnitude during perimenopause. **OBJECTIVE** To investigate whether MAO-A total distribution volume (VT), an index of MAO-A density, is elevated in women of perimenopausal age (41-51 years). **DESIGN, SETTING, AND PARTICIPANTS** In a cross-sectional study at a tertiary care psychiatric hospital, 58 women underwent carbon 11-labeled harmine positron emission tomography. These included 19 young women of reproductive age (mean [SD], 28.26 [5.05] years), 27 women of perimenopausal age (mean [SD] age, 45.21 [3.41] years; including 14 women with change in menstrual cycle length with a mean [SD] age of 45.50 [4.00] years and 13 women with no change in menstrual cycle length with a mean [SD] age of 44.92 [2.81] years), and 12 women in menopause (mean [SD] age, 56.25 [3.19] years). **MAIN OUTCOMES AND MEASURES** Values of MAO-A VT in the prefrontal cortex, anterior cingulate cortex, dorsal striatum, ventral striatum, thalamus, hippocampus, and midbrain. **RESULTS** On average, MAO-A VT in perimenopausal age was elevated by 34% compared with reproductive age and by 16% compared with menopause (multivariate analysis of variance, group effect,  $F_{16,94} = 3.03$ ;  $P < .001$ ). Within the perimenopausal age group, meeting Stages of Reproductive Aging Workshop criteria for perimenopause, which is mainly based on menstrual cycle length, was not associated with MAO-A VT ( $F_{8,18} = 0.548$ ;  $P = .81$ ) but tendency to cry was positively correlated with MAO-A VT in the prefrontal cortex ( $r = 0.54$ ;  $P = .008$ ). **CONCLUSIONS AND RELEVANCE** To our knowledge, this is the first report of a change in a central biomarker during perimenopausal age that is also present during major depressive episodes and high-risk states for major depressive episodes. The functions of MAO-A influence oxidative stress and apoptosis, 2 processes implicated as excessive in both mood disorders and dementia. Hence, greater MAO-A VT during perimenopause may represent a new target for assessing novel interventions to prevent mood disorders and reduce longer-term risk of neurodegenerative disease.

**Obesity (Silver Spring). 2014 Jun 4. doi: 10.1002/oby.20799. [Epub ahead of print]**

### **Body-size throughout life and risk of depression in postmenopausal women: Findings from the E3N cohort.**

Perquier F1, Lasfargues A, Mesrine S, Clavel-Chapelon F, Fagherazzi G.

**OBJECTIVE:** To assess the association of body-size from childhood to age 40 with depression in postmenopausal French women. **METHODS:** Participants of the E3N study reported birth characteristics and silhouettes matching theirs at age 8, at puberty, at 20-25, and 35-40 years ( $n = 41,144$ ). Depression was assessed by the Center for Epidemiological Studies Depression Scale and split into new-onset and recurrent depression according to women's history of psychological disorder. Risks were estimated with multinomial logistic regression models. **RESULTS:** Low or high birth weights were associated with risk of depression. A large body-size at age 8 and a large body-size over the life-course were both associated with the risk of new-onset depression specifically, while women with a large body-size increase at puberty were at risk of recurrent depression. Largest body-sizes at 20-25 or 35-40 years were associated with both the risk of new-onset and recurrent depression, especially in normal weight women. However, a lean silhouette at 35-40 years was associated with the risk of recurrent depression only. **CONCLUSIONS:** Women with a large body-size from

childhood to adulthood might be at higher risk of new-onset postmenopausal depression, while leanness in adulthood could be associated with a higher risk of recurrent depression.

**J Steroid Biochem Mol Biol. 2014 Jun 2. doi: 10.1016/j.jsbmb.2014.04.012. [Epub ahead of print]**

### **Neurobiology of DHEA and effect on sexuality, mood and cognition.**

Pluchino N1, Drakopoulos P2, Bianchi-Demicheli F3, Wenger JM2, Petignat P2, Genazzani AR4.

Dehydroepiandrosterone (DHEA) and its sulfate ester, DHEAS, are the most abundant steroid hormones in the humans. However, their physiological significance, their mechanisms of action and their possible roles in disease are not fully clarified. Biological actions of DHEA(S) in the brain involve neuroprotection, neurite growth, neurogenesis and neuronal survival, apoptosis, catecholamine synthesis and secretion, as well as anti-oxidant, anti-inflammatory and antiglucocorticoid effects. In addition, DHEA affects neurosteroidogenesis and endorphin synthesis/release. We also demonstrated in a model of ovariectomized rats that DHEA therapy increases proceptive behaviors, already after 1 week of treatment, affecting central function of sexual drive. In women, the analyses of clinical outcomes are far from being conclusive and many issues should still be addressed. Although DHEA preparations have been available in the market since the 1990s, there are very few definitive reports on the biological functions of this steroid. We demonstrate that 1 year DHEA administration at the dose of 10mg provided a significant improvement in comparison with vitamin D in sexual function and in frequency of sexual intercourse in early postmenopausal women. Among symptomatic women, the spectrum of symptoms responding to DHEA requires further investigation, to define the type of sexual symptoms (e.g. decreased sexual function or hypoactive sexual desire disorder) and the degree of mood/cognitive symptoms that could be responsive to hormonal treatment. In this regard, our findings are promising, although they need further exploration with a larger and more representative sample size. This article is part of a Special Issue entitled: Essential role of DHEA.

**J Nutr Health Aging. 2014;18(5):479-86. doi: 10.1007/s12603-014-0002-x.**

### **Diet, weight, cytokines and bone health in postmenopausal women.**

Gunn CA1, Weber JL, Kruger MC.

**Objectives:** To investigate diet and nutrition-related factors associated with bone loss in a group of postmenopausal (PM) women. **Nutritional intake, inflammatory markers and body composition (weight, body mass index, fat/lean mass) were analysed for associations with bone mineral density (BMD).** **Design:** A cross sectional study examining correlations between BMD (Dual-energy X ray absorptiometry; DXA) and dietary intake (3-day diaries), body composition and plasma bone and inflammatory markers: C-terminal telopeptide of type I collagen (CTX) and procollagen type I N propeptide (P1NP), C- reactive protein (CRP), interleukin 6 and 10 (IL-6, IL-10), tumour necrosis factor (TNF) and osteoprotegerin (OPG). **Setting:** Community dwelling women from the Auckland, Hawke's Bay and Manawatu regions in New Zealand. **Participants:** 142 healthy, PM women aged 50-70 years. **Results:** OPG (per kilogram fat mass) was increased in women with osteoporosis ( $p < 0.001$ ) compared to groups classified with normal BMD and osteopenia. Protein, vitamin B12, zinc, potassium and dairy intake were all positively correlated with higher BMD while dairy and potassium intakes also inversely correlated with CTX. Body composition (weight, BMI and fat/lean mass) had strong positive associations with BMD. Multiple regression analysis showed body weight, potassium and dairy intake were predictors of increased BMD in PM women and explained 39% ( $r^2 = 0.39$ ,  $p < 0.003$ ) of variance. **Conclusion:** BMD was negatively correlated with OPG and positively with weight, dairy and potassium intake. This study highlights the importance of maintaining adequate body weight and emphasising dairy and potassium predominantly sourced from fruit/vegetables to reduce bone loss at midlife.