



## Selección de Resúmenes de Menopausia

Semanas del 23 al 29 de Marzo 2016

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### **Vitamin d production in UK caucasian and south asian women following UVR exposure.**

Hakim OA, Hart K, McCabe P, Berry J, Francesca R, Rhodes LE, Spyrou N, Alfuraih A, Lanham-New S.

**BACKGROUND:** It is known that skin pigmentation reduces the penetration of ultraviolet radiation (UVR) and thus photosynthesis of 25-hydroxyvitamin D (25(OH)D). However ethnic differences in 25(OH)D production remain to be elucidated. **OBJECTIVE:** The aim of this study was to investigate differences in vitamin D production between UK South Asian and Caucasian postmenopausal women, in response to a defined and controlled exposure to UVR. **DESIGN:** Seventeen women; 9 white Caucasian (skin phototype II and III), 8 South Asian women (skin phototype IV and V) participated in the study, acting as their own controls. Three blood samples were taken for the measurement of vitamin D status during the run in period (9 days, no sunbed exposure) after which, all subjects underwent an identical UVR exposure protocol irrespective of skin colour (9 days, 3 sun bed sessions, 6, 8 and 8minutes respectively with approximately 80% body surface exposed). Skin tone was measured four times during the study. **RESULTS:** Despite consistently lower 25(OH)D levels in South Asian women, they were shown to synthesise vitamin D as efficiently as Caucasians when exposed to the same dose of UVR. Interestingly, the baseline level of vitamin D rather than ethnicity and skin tone influenced the amount of vitamin D synthesised. **CONCLUSIONS:** This study have found no ethnic differences in the synthesis of 25(OH)D, possibly due to the baseline differences in 25(OH)D concentration or due to the small population size used in this study. Applying mixed linear model, findings indicated no effect of ethnicity and skin tone on the production of vitamin D; baseline level and length of exposure were the critical factors. To confirm that ethnicity and skin tone has no effect on 25(OH)D production, a larger sample size study is required that considers other ethnic groups with highly pigmented skin. Initial vitamin D status influences the amount of UVB needed to reach equal serum concentrations.

**World J Psychiatry. 2016 Mar 22;6(1):54-65. doi: 10.5498/wjp.v6.i1.54. eCollection 2016.**

### **Sex differences in cognitive impairment in Alzheimer's disease.**

Laws KR, Irvine K, Gale TM.

Sex differences in neurocognitive abilities have been extensively explored both in the healthy population and in many disorders. Until recently, however, little work has examined such differences in people with Alzheimer's disease (AD). This is despite clear evidence that AD is more prevalent in women, and converging lines of evidence from brain imaging, post-mortem analyses, hormone therapy and genetics suggesting that AD affects men and women differently. We provide an overview of evidence attesting to the poorer cognitive profiles in women than in men at the same stage of AD. Indeed, men significantly outperform women in several cognitive domains, including: Language and semantic abilities, visuospatial abilities and episodic memory. These differences do not appear to be attributable to any differences in age, education, or dementia severity. Reasons posited for this female disadvantage include a reduction of estrogen in postmenopausal women, greater cognitive reserve in men, and the influence of the apolipoprotein E  $\epsilon 4$  allele. Assessment of cognitive abilities contributes to the diagnosis of the condition and thus, it is crucial to identify the role of sex differences if potentially more accurate diagnoses and treatments are to emerge.

**Maturitas. 2016 May;87:67-71. doi: 10.1016/j.maturitas.2016.02.015. Epub 2016 Feb 28.**

### **Personal and professional use of menopausal hormone therapy among gynecologists: A multinational study (REDLINC VII).**

Danckers L, Blümel JE, Witis S, Vallejo MS, Tserotas K, Sánchez H, Salinas C, Saavedra J, Rojas JA, Onatra W, Ojeda E, Mostajo D, Morera F, Monterrosa A, Montaña A, Meruvia N, Martino M, Martínez J, Lima S, González E, Gómez G, Espinoza MT, Castillo O, Camprostrini B, Calle A, Broutin G, Bencosme A, Arteaga E, Ayala F, Chedraui P.

**BACKGROUND:** Previously, the REDLINC VI study showed that the main reason for the low use of menopausal hormone therapy (MHT) was its low rate of prescription by doctors. **OBJECTIVE:** To determine the use of MHT and perceived related risks among gynecologists. **METHODS:** A self-administered and anonymous questionnaire was

delivered to certified gynecologists in 11 Latin American countries. RESULTS: A total of 2154 gynecologists were contacted, of whom 85.3% responded to the survey (n=1837). Mean age was 48.1±11.4 years; 55.5% were male, 20.3% were faculty members and 85% had a partner. Overall, 85.4% of gynecologists responded that they would use MHT if they had menopausal symptoms (81.8% in the case of female gynecologists) or prescribe it to their partner (88.2% in the case of male gynecologists; p<0.001). Perceived risk related to MHT use (on a scale from 0 to 10) was higher among female than among male gynecologists (4.06±2.09 vs. 3.83±2.11, p<0.02). The top two perceived reported risks were thromboembolism (women 33.6% vs. men 41.4%, p<0.009) and breast cancer (women 38.5% vs. men 33.9%, p<0.03). Overall, gynecologists reported prescribing MHT to 48.9% of their symptomatic patients (women 47.3% vs. men 50.2%, p<0.03) and 86.8% currently prescribed non-hormonal remedies and 83.8% alternative therapies for the management of the menopause. Gynecologists who were older and academic professionals prescribed MHT more often. CONCLUSION: Although this Latin American survey showed that gynecologists are mostly supporters of MHT use (for themselves or their partners), this is not necessarily reflected in their clinical practice.

**Maturitas. 2016 May;87:33-9. doi: 10.1016/j.maturitas.2016.02.003. Epub 2016 Feb 8.**

### **Menopausal vasomotor symptoms are associated with poor self-assessed work ability.**

Gartoulla P, Bell RJ, Worsley R, Davis SR.

OBJECTIVES: It has been hypothesised that vasomotor symptoms (VMS), the hallmark of menopause, may affect women's workplace performance. The aim of this study was to investigate the association between VMS and self-reported work ability, taking into account socio-demographic characteristics. Study design/Main Outcome measures: A national cross-sectional survey of women, aged 40-65 years, was conducted between October 2013 and March 2014. Participants provided socio-demographic and lifestyle factors and completed the Menopause Specific Quality of Life Questionnaire (MENQOL) and the Work Ability Index (WAI). RESULTS: Of 2020 women who comprised the study sample, 1274 were in paid employment and 1263 completed the WAI. The WAI score was good-excellent for 81.5% of women and poor-moderate for 18.5%. After adjustment for socio-demographic characteristics, having any VMS was associated with greater likelihood of poor-moderate work ability [odds ratio (OR)=2.45, 95% CI 1.69-3.54]. Poorer work ability was significantly and independently associated with being un-partnered, obese or overweight, smoking, being carer and having insecure housing finance, but not with age. CONCLUSIONS: Overall, most women functioned well at work. We observed an association suggesting a relationship not only between menopausal VMS and personal wellbeing, but also between VMS and self-assessed work ability. Although 4 in 5 women functioned well at work, recognition of the association with VMS may improve wellbeing and work performance of working women at midlife.

**Maturitas. 2016 May;87:18-26. doi: 10.1016/j.maturitas.2016.02.006. Epub 2016 Feb 12.**

### **Body fatness and endogenous sex hormones in the menopausal transition.**

Zsakai A, Karkus Z, Utczas K, Biri B, Sievert LL, Bodzsar EB.

BACKGROUND: Age at the final menstrual period is of clinical and public health interest because the age at which natural menopause occurs may be a marker of ageing and health, and in general the menopausal transition increases the risk of many diseases, e.g. redistribution in the pattern of adiposity during the menopausal transition may increase risk of metabolic disease. The purpose of this research was to study the relationship between the menopausal status and body fatness. SUBJECTS AND METHODS: A random sample of 1932 Hungarian women was studied. Body composition was estimated by body impedance analysis. In a subsample free estradiol and progesterone levels in saliva were quantified. RESULTS: Body fat mass increased until the late 50s and then had a decrease through senescence. Premenopausal women who were much older than the median age at menopause had a higher amount of fat than their postmenopausal age-peers, while postmenopausal women, whose menopause occurred much earlier than the median age at menopause, had less fat than their premenopausal age-peers. The body fat mass in premenopausal women with low levels of sex hormones was always below the age-median value of the menopausal status subgroups, while the body fat mass of postmenopausal women with high levels of sex hormone levels was above the age-median values. CONCLUSIONS: The analysis of body fatness in the menopausal transition revealed that (1) the rate of reproductive ageing and the body fat pattern were significantly related, and (2) body fat mass of women with unexpected levels of sex hormones was related more to their hormonal levels than to their menopausal status or their age. Thus future epidemiological screenings of women exposed to higher levels of menopause-related health risks should be expanded beyond the estimation of menopausal status based only on menstrual history to include sex hormone level assessment, as well as body composition analysis.

**PLoS One. 2016 Mar 24;11(3):e0151182. doi: 10.1371/journal.pone.0151182. eCollection 2016.**

## **Effects of Combination of Estradiol with Selective Progesterone Receptor Modulators (SPRMs) on Human Breast Cancer Cells In Vitro and In Vivo.**

Nair HB, Santhamma B, Krishnegowda NK, Dileep KV, Nickisch KJ.

Use of estrogen or estrogen / progestin combination was an approved regimen for menopausal hormonal therapy (MHT). However, more recent patient-centered studies revealed an increase in the incidence of breast cancer in women receiving menopausal hormone therapy with estrogen plus progestin rather than estrogen alone. Tissue selective estrogen complex (TSEC) has been proposed to eliminate the progesterone component of MHT with supporting evidences. Based on our previous studies it is evident that SPRMs have a safer profile on endometrium in preventing unopposed estrogenicity. We hypothesized that a combination of estradiol (E2) with selective progesterone receptor modulator (SPRM) to exert a safer profile on endometrium will also reduce mammary gland proliferation and could be used to prevent breast cancer when used in MHT. In order to test our hypothesis, we compared the estradiol alone or in combination with our novel SPRMs, EC312 and EC313. The compounds were effectively controlled E2 mediated cell proliferation and induced apoptosis in T47D breast cancer cells. The observed effects were found comparable that of BZD in vitro. The effects of SPRMs were confirmed by receptor binding studies as well as gene and protein expression studies. Proliferation markers were found downregulated with EC312/313 treatment in vitro and reduced E2 induced mammary gland proliferation, evidenced as reduced ductal branching and terminal end bud growth in vivo. These data supporting our hypothesis that E2+EC312/EC313 blocked the estrogen action may provide basic rationale to further test the clinical efficacy of SPRMs to prevent breast cancer incidence in postmenopausal women undergoing MHT.

**Eur J Contracept Reprod Health Care. 2016 Mar 24:1-9. [Epub ahead of print]**

## **Women's preferences for menstrual bleeding frequency: results of the Inconvenience Due to Women's Monthly Bleeding (ISY) survey.**

Nappi RE, Fiala C, Chabbert-Buffet N, Häusler G, Jamin C, Lete I, Lukasiewicz M, Pintiaux A, Lobo P.

**OBJECTIVES:** Our aim was to assess the level of inconvenience associated with monthly bleeding, determine how many women would prefer a bleeding frequency of less than once a month, and what would motivate their choice. **METHODS:** A 15-min quantitative online survey was carried out among 2883 women aged between 18 and 45 years in six European countries (Austria, Belgium, France, Italy, Poland and Spain). **RESULTS:** Of those surveyed, 1319 women used a combined hormonal contraceptive (CHC group) and 1564 used a non-hormonal contraceptive or no contraceptive (non-HC group). The menstrual period was significantly longer (5 vs. 4.5 days), heavier (16% vs. 8% heavy menstrual flow) and associated with more symptoms (6.1 vs. 5.6) in non-HC users than in CHC users ( $p < 0.0001$ ). More than half of the women in each group reported pelvic pain, bloating/swelling, mood swings and irritability, but the rate was significantly higher in the non-HC group. Given the choice, 57% of women in both groups said they would opt for longer intervals between periods. Sexuality, social life, work and sporting activities were key factors affecting their decision. **CONCLUSIONS:** The majority of women would prefer to have menstrual periods less than once a month, with a frequency ranging from once every 3 months to no periods at all. This can be explained by the desire to avoid the unpleasant aspects of menstruation and its negative impact on private and professional life.

**Geriatr Psychol Neuropsychiatr Vieil. 2016 Mar 1;14(1):7-15.**

## **Epidemiology of vitamin-D deficiency.**

Souberbielle JC.

The 25-hydroxyvitamin D (25OHD) serum concentration is the consensual marker of vitamin D status. In the general population, the Institute of Medicine considers that a 25OHD level  $>20$  ng/mL is sufficient for bone health in most subjects. In osteoporosis patients, in those who have a pathology or who receive drugs that may increase the risk of osteoporosis, as well as in patients with chronic kidney disease, many experts think that an optimal vitamin D status is better defined by a 25OHD concentration  $>30$  ng/mL. In the French general population, 43-50% of subjects have a 25OHD level  $<20$  ng/mL and approximately 80% have a 25OHD  $<30$  ng/mL. In chronic diseased patients, as well as in some categories of the general population such as elderly people, the percentage of subjects with a 25OHD level below 20 ng/mL is frequently well above 50%. Epidemiologic studies allow us to identify risk factors for vitamin D deficiency such as ageing, overweight, dark skin pigmentation, wearing covering clothes, or having a low level of outdoor activity. This will help to target vitamin D supplementation to "at-risk" subjects. However, discussions on means to improve the vitamin D status of the overall population such as allowing higher levels of food fortification, are needed.