 **Selección de Resúmenes de Menopausia**

Semana del 10 al 21 de Septiembre de 2014

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**World J Orthop. 2014 Sep 18;5(4):486-95. doi: 10.5312/wjo.v5.i4.486. eCollection 2014.**

**Bone three-dimensional microstructural features of the common osteoporotic fracture sites.**

Chen H, Kubo KY.

Osteoporosis is a common metabolic skeletal disorder characterized by decreased bone mass and deteriorated bone structure, leading to increased susceptibility to fractures. With aging population, osteoporotic fractures are of global health and socioeconomic importance. The three-dimensional microstructural information of the common osteoporosis-related fracture sites, including vertebra, femoral neck and distal radius, is a key for fully understanding osteoporosis pathogenesis and predicting the fracture risk. Low vertebral bone mineral density (BMD) is correlated with increased fracture of the spine. Vertebral BMD decreases from cervical to lumbar spine, with the lowest BMD at the third lumbar vertebra. Trabecular bone mass of the vertebrae is much lower than that of the peripheral bone. Cancellous bone of the vertebral body has a complex heterogeneous three-dimensional microstructure, with lower bone volume in the central and anterior superior regions. Trabecular bone quality is a key element to maintain the vertebral strength. The increased fragility of osteoporotic femoral neck is attributed to low cancellous bone volume and high compact porosity. Compared with age-matched controls, increased cortical porosity is observed at the femoral neck in osteoporotic fracture patients. Distal radius demonstrates spatial inhomogeneous characteristic in cortical microstructure. The medial region of the distal radius displays the highest cortical porosity compared with the lateral, anterior and posterior regions. Bone strength of the distal radius is mainly determined by cortical porosity, which deteriorates with advancing age.

**Br J Nutr. 2014 Sep 18:1-8. [Epub ahead of print]**

**Cholesterol and egg intakes and the risk of type 2 diabetes: The Japan Public Health Center-based Prospective Study.**

Kurotani K, Nanri A, Goto A, Mizoue T, Noda M, Oba S, Sawada N, Tsugane S.

Limited and inconsistent associations between cholesterol and egg consumption and type 2 diabetes risk have been observed in Western countries. In the present study, the association of dietary cholesterol and egg intakes with type 2 diabetes risk was examined prospectively. The study subjects comprised 27 248 men and 36 218 women aged 45-75 years who participated in the second survey of the Japan Public Health Center-based Prospective Study and had no histories of type 2 diabetes or other serious diseases. Dietary cholesterol and egg intakes were estimated using a validated 147-item FFQ. The OR of self-reported, physician-diagnosed type 2 diabetes over 5 years were estimated using multiple logistic regression. A total of 1165 newly diagnosed cases of type 2 diabetes were self-reported. Although dietary cholesterol intake was not associated with type 2 diabetes risk in men, it was found to be associated with a 23 % lower odds of type 2 diabetes risk in women in the highest quartile of intake, albeit not statistically significant, compared with those in the lowest quartile (P trend= 0·08). Such risk reduction was somewhat greater among postmenopausal women; the multivariable-adjusted OR for the highest quartile of cholesterol intake compared with the lowest quartile was 0·68 (95 % CI 0·49, 0·94; P trend= 0·04). No association between egg intake and type 2 diabetes risk was found in either men or women. In conclusion, higher intake of cholesterol or eggs may not be associated with an increased risk of type 2 diabetes in Japanese populations. The observed association between decreased type 2 diabetes risk and higher dietary cholesterol intake in postmenopausal women warrants further investigation.

**Climacteric. 2014 Sep 16:1-4. [Epub ahead of print]**

**Hormones and venous thromboembolism among postmenopausal women.**

Scarabin PY.

Venous thromboembolism (VTE) is a common and potentially fatal disease in postmenopausal women. VTE has emerged as the most prevalent adverse effect of oral estrogens in 50-60-year-old women. Obesity and VTE history can be easily used to identify women at high risk but genetic screening is not cost-effective. Based on consistent biological and epidemiological findings, transdermal estrogen is the safest option with respect to VTE, especially in women at high risk. There is strong evidence that VTE risk is greater in women using medroxyprogesterone acetate compared with those receiving other progestins. Based on observational data, progesterone appears safe with respect to VTE. More research and action are needed to avert the hepatic first-pass effect of oral estrogens and to increase awareness of hormone-related VTE. Improving individual risk stratification and a personalized approach to hormone therapy are major challenges for future work.

**Gynecol Endocrinol. 2014 Sep 15:1-4. [Epub ahead of print]**

**The influence of hormone replacement therapy on the salivary flow of post-menopausal women.**

Lago ML1, de Oliveira AE, Lopes FF, Ferreira EB, Rodrigues VP, Brito LM.

Abstract The aim of this study is to investigate the influence of hormone therapy on salivary flow in menopausal women. It is a case-control study involving 86 post-menopausal women. The case group consisted of 47 women undergoing estroprogestative or estrogen hormone replacement therapy (HRT), and the control group consisted of 39 women who did not receive any HRT. All patients were submitted to a standard questionnaire, followed by total stimulated sialometry and determination of body mass index (BMI). The salivary flow was classified as follows: normal (1.0-3.0 mL/min), low (0.7-1.0 mL/min), and hyposalivation (<0.7 mL/min). The results were analyzed statistically by the chi-square test, logistic regression model, and linear regression (p < 0.05). The HRT group presented an association of protection, even after adjusting the analysis, for low salivary flow (Adjusted OR = 0.22; 95% CI = 0.05-0.88; p = 0.034), and hyposalivation (Adjusted OR = 0.30; 95% CI = 0.10-0.92; p = 0.036). The results suggest that estroprogestative therapy (β = + 0.53; p = 0.022) has greater influence on the increase of salivary flow than estrogen therapy (β = +0.35; p = 0.137). The study concludes stating salivary flow was influenced by HRT on the post-menopausal women studied.

**Psychoneuroendocrinology. 2014 Sep 1;50C:167-180. doi: 10.1016/j. [Epub ahead of print]**

**Hormonal treatment increases the response of the reward system at the menopause transition: A counterbalanced randomized placebo-controlled fMRI study.**

Thomas J1, Météreau E1, Déchaud H2, Pugeat M2, Dreher JC3.

Preclinical research using rodent models demonstrated that estrogens play neuroprotective effects if they are administered during a critical period near the time of cessation of ovarian function. In women, a number of controversial epidemiological studies reported that a neuroprotective effect of estradiol may be obtained on cognition and mood-related disorders if hormone therapy (HT) begins early at the beginning of menopause. Yet, little is known about the modulatory effects of early HT administration on brain activation near menopause. Here, we investigated whether HT, initiated early during the menopause transition, increases the response of the reward system, a key brain circuit involved in motivation and hedonic behavior. We used fMRI and a counterbalanced, double-blind, randomized and crossover placebo-controlled design to investigate whether sequential 17β-estradiol plus oral progesterone modulate reward-related brain activity. Each woman was scanned twice while presented with images of slot machines, once after receiving HT and once under placebo. The fMRI results demonstrate that HT, relative to placebo, increased the response of the striatum and ventromedial prefrontal cortex, two areas that have been shown to be respectively involved during reward anticipation and at the time of reward delivery. Our neuroimaging results bridge the gap between animal studies and human epidemiological studies of HT on cognition. These findings establish a neurobiological foundation for understanding the neurofunctional impact of early HT initiation on reward processing at the menopause transition.

**PLoS One. 2014 Sep 11;9(9):e106473. doi: 10.1371/journal.pone.0106473. eCollection 2014.**

**The ocular benefits of estrogen replacement therapy: a population-based study in postmenopausal korean women.**

Na KS1, Jee DH1, Han K2, Park YG2, Kim MS1, Kim EC1.

PURPOSE: To elucidate the prevalence of cataract, glaucoma, pterygia, and diabetic retinopathy among Korean postmenopausal women with or without estrogen replacement therapy (ERT). METHODS: A cross-sectional, nationally representative sample from the 4th Korea National Health and Nutrition Examination Survey (KNHANES IV) (2007-2009) was used. Participants were interviewed for the determination of socioeconomic and gynecologic factors. Each woman also underwent an ophthalmologic examination and provided a blood sample for risk factor assessment. RESULTS: Of 3968 postmenopausal women enrolled, 3390 had never received estrogen, and 578 were undergoing estrogen treatment. After adjusting for age, diabetes, hypertension, high cholesterol levels, and high low-density lipoprotein levels, the prevalence of anterior polar cataract, retinal nerve fiber layer (RNFL) defect, and flesh pterygium was higher in the non-ERT group (OR, 3.24; 95% CI, 1.12-9.35, OR 1.70; 95% CI, 1.04-2.78, OR 3.725; 95% CI, 1.21-11.45, respectively). Further, the prevalence of atrophic pterygium was lower in the non-ERT group compared to that in the ERT group (OR, 0.21, 95% CI, 0.07-0.63). CONCLUSIONS: These data suggest that ERT has a protective effect against the development of anterior polar cataract, flesh pterygium, and RNFL defect.

**Menopause. 2014 Sep 8. [Epub ahead of print]**

**Hormone therapy and mood in perimenopausal and postmenopausal women: a narrative review.**

Toffol E1, Heikinheimo O, Partonen T.

OBJECTIVE: Between 15% and 50% of women experience depressive symptoms during the menopausal transition; in 15% to 30% of perimenopausal women, they are severe enough to be regarded as a depressive disorder. Fluctuations in gonadal hormone levels are thought to contribute to these depressive conditions. Hormone therapy is commonly used to alleviate climacteric symptoms, but its effects on mood are less clear. We narratively reviewed the literature on the effects of different types of hormone therapy on mood. METHODS: Using PubMed/Medline, we searched for studies of hormone therapy in relation to depressive symptoms and disorders in perimenopause and postmenopause. RESULTS: A number of studies consistently reported estrogen therapy to be effective in improving mood in perimenopausal women. However, its efficacy for overt depression or during postmenopause was more questionable. The progestogenic component in combined hormone therapy was found to potentially counteract the beneficial influence of estrogens on mood and to even induce negative mood symptoms. In specifically focused studies, a combination of hormone therapy and antidepressants was effective in depressed perimenopausal and postmenopausal women. CONCLUSIONS: Hormone therapy may contribute to alleviating menopause-related depressive symptoms. Its administration should be followed across time and should be specifically individualized. In cases of more severe depressive conditions, a combination of antidepressant and hormone therapy should be considered.

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**Treatment of postmenopausal women with topical progesterone creams and gels: are they effective?**

Stanczyk FZ.

Topical progesterone creams and gels can be obtained over the counter and/or by prescription from custom-compounding pharmacies and are used by thousands of postmenopausal women for hormonal treatment. However, the effectiveness of these preparations for protecting the endometrium from unopposed estrogen is controversial, due largely to the very low serum progesterone levels that are achieved. Despite these low serum levels, salivary and capillary blood levels are very high and a protective endometrium has been reported in a limited number of studies. Topical alcohol-based, but not water-based, gels appear to yield luteal-phase serum progesterone levels but studies with these preparations are scant. Long-term studies with percutaneous progesterone creams and gels are likely to provide valuable information for treatment of postmenopausal women with this popular route of administration.

**J Obstet Gynaecol Can. 2014 Sep;36(9):830-3.**

**Managing menopause.**

Reid R, Abramson BL, Blake J, Desindes S, Dodin S, Johnston S, Rowe T, Sodhi N, Wilks P, et al.

OBJECTIVE: To provide updated guidelines for health care providers on the management of menopause in asymptomatic healthy women as well as in women presenting with vasomotor or urogenital symptoms and on considerations related to cardiovascular disease, breast cancer, urogynaecology, and sexuality. OUTCOMES: Lifestyle interventions, prescription medications, and complementary and alternative therapies are presented according to their efficacy in the treatment of menopausal symptoms. EVIDENCE: Published literature was retrieved through searches of PubMed and The Cochrane Library in August and September 2012 with the use of appropriate controlled vocabulary. Results were limited to publication dates of 2009 onwards and to material in English or French. Chapter 1: Assessment and Risk Management of Menopausal Women Recommendations for Patients 1. Women aged 51 to 70 should consume 7 servings of vegetables and fruits, 6 of grain products, 3 of milk and alternatives, and 2 of meat and alterna-tives daily. (III-A) 2. A diet low in sodium and simple sugars, with substitution of unsaturated fats for saturated and trans fats, as well as increased consumption of fruits, vegetables, and fibre, is recommended. (I-A) 3. Routine vitamin D supplementation and calcium intake for all Canadian adults year round is recommended. (I-A) 4. Achieving and maintaining a healthy weight throughout life is recommended. (I-A) 5. Women aged 18 to 64 should accumulate at least 150 minutes of moderate to vigorous aerobic physical activity per week in bouts of 10 minutes or more. (I-A) Recommendations for Health Care Providers 1. A waist circumference ≥ 88 cm (35 in) for women is associated with an increased risk of health problems such as diabetes, heart disease, and hypertension and should be part of the initial assessment to identify risk. (II-2A) 2. Tobacco-use status should be updated for all patients on a regular basis, (I-A) health care providers should clearly advise patients to quit, (I-C) the willingness of patients to begin treatment to achieve abstinence (quitting) should be assessed, (I-C) and every tobacco user who expresses the willingness to begin treatment to quit should be offered assistance. (I-A) 3. Blood pressure should be assessed and controlled as women go through menopause. (II-2B) If the systolic blood pressure is ≥ 140 mmHg and/or the diastolic blood pressure is ≥ 90 mmHg, a specific visit should be scheduled for the assessment of hypertension. (III-A) 4. Women ≥ 50 years of age or postmenopausal and those with additional risk factors, such as current cigarette smoking, diabetes, and arterial hypertension, should have lipid-profile screening done. (II-2A) 5. A cardiovascular risk assessment using the Framingham Risk Score should be completed every 3 to 5 years for women aged 50 to 75. (II-2A) 6. A history of past pregnancy complications (preeclampsia, gestational hypertension, gestational diabetes, placental abruption, idiopathic preterm delivery, and/or fetal growth restriction) should be elicited since it can often predict an increased risk for premature cardiovascular disease and cardiovascular death and may inform decisions about the need for screening. (II-2B) Chapter 2: Cardiovascular Disease Recommendations 1. Health care providers should not initiate hormone therapy for the sole purpose of preventing cardiovascular disease in older postmenopausal women since there are no data to support this indication for hormone therapy. (I-A) 2. The risk of venous thromboembolism increases with age and obesity, in carriers of a factor V Leiden mutation, and in women with a history of deep vein thrombosis. Transdermal therapy is associated with a lower risk of deep vein thrombosis than oral therapy and should be considered only if the benefits outweigh the risks. (III-C) Health care providers should abstain from prescribing oral hormone therapy for women at high risk of venous thromboembolism. (I-A) 3. Health care providers should initiate other evidence-based therapies and interventions to effectively reduce the risk of cardiovascular disease events in women with or without vascular disease. (I-A) 4. Risk factors for stroke (obesity, hypertension, elevated cholesterol levels, diabetes, and cigarette smoking) should be addressed in all postmenopausal women. (I-A) 5. If prescribing hormone therapy to older postmenopausal women, health care providers should address cardiovascular risk factors; low- or ultralow-dose estrogen therapy is preferred. (I-B) 6. Health care providers may prescribe hormone therapy to diabetic women for the relief of menopausal symptoms. (I-A) Chapter 3: Menopausal Hormone Therapy and Breast Cancer Recommendations 1. Health care providers should periodically review the risks and benefits of prescribing hormone therapy to a menopausal woman in light of the association between duration of use and breast cancer risk. (I-A) 2. Health care providers may prescribe hormone therapy for menopausal symptoms in women at increased risk of breast cancer with appropriate counselling and surveillance. (I-A) 3. Health care providers should clearly discuss the uncertainty of risks associated with systemic hormone therapy after a diagnosis of breast cancer in women seeking treatment for distressing symptoms (vasomotor symptoms or vulvovaginal atrophy). (I-B) Chapter 4: Vasomotor Symptoms Recommendations 1. Lifestyle modifications, including reducing core body temperature, regular exercise, weight management, smoking cessation, and avoidance of known triggers such as hot drinks and alcohol, may be recommended to reduce mild vasomotor symptoms. (I-C) 2. Health care providers should offer hormone therapy, estrogen alone or combined with a progestin, as the most effective therapy for the medical management of menopausal symptoms. (I-A) 3. Progestins alone or low-dose oral contraceptives can be offered as alternatives for the relief of menopausal symptoms during the menopausal transition. (I-A) 4. Non-hormonal prescription therapies, including certain antidepressant agents, gabapentin, and clonidine, may afford some relief from hot flashes but have their own side effects. (I-B) 5. There is limited evidence of benefit for most complementary and alternative approaches to the management of hot flashes. Without good evidence for effectiveness, and in the face of minimal data on safety, these approaches should not be recommended. 6. Estrogen therapy can be offered to women who have undergone surgical menopause for the treatment of endometriosis. (I-A) Chapter 5: Urogenital Health Recommendations 1. Conjugated estrogen cream, an intravaginal sustained-release estradiol ring, and low-dose estradiol vaginal tablets are recommended as effective treatment for vaginal atrophy. (I-A) 2. Routine progestin co-therapy is not required for endometrial protection in women receiving vaginal estrogen therapy in an appropriate dose. (III-C) 3. Vaginal lubricants may be recommended for subjective symptom improvement of dyspareunia. (II-2B) 4. Because systemic absorption of vaginal estrogen is minimal, its use is not contraindicated in women with contraindications to systemic estrogen therapy, including recent stroke and thromboembolic disease. (III-C) However, there are currently insufficient data to recommend its use in women with breast cancer who are receiving aromatase inhibitors (where the goal of adjuvant therapy is a complete absence of estrogen at the tissue level). Its use in this circumstance needs to be dictated by quality-of-life concerns after discussion of possible risks. (III-C) 5. Systemic estrogen therapy should not be recommended for the treatment of postmenopausal urge or stress urinary incontinence given the lack of evidence of therapeutic benefit. (I-A) Vaginal estrogen may, however, be recommended, particularly for the management of urinary urge incontinence. (II-1A) 6. As part of the management of stress incontinence, women should be encouraged to try non-surgical options, including weight loss (in obese women). (I-A) Pelvic floor physiotherapy, with or without biofeedback, (II-1B) weighted vaginal cones, (II-2B) functional electrical stimulation, (I-B) and/or intravaginal pessaries (II-2B) can also be recommended. 7. (ABSTRACT TRUNCATED)