

## Selección de Resúmenes de Menopausia

Semana del 29 de agosto al 4 de Septiembre de 2018 María Soledad Vallejo. Clínica Quilín. Universidad de Chile

J Headache Pain. 2018 Aug 31;19(1):76. doi: 10.1186/s10194-018-0896-5.

Effect of exogenous estrogens and progestogens on the course of migraine during reproductive age: a consensus statement by the European Headache Federation (EHF) and the European Society of Contraception and Reproductive Health (ESCRH).

Sacco S, Merki-Feld GS, Ægidius KL, Bitzer J, Canonico M, Gantenbein AR, Kurth T, Lampl C9, et al; European Headache Federation (EHF), the European Society of Contraception and Reproductive Health (ESCRH).

We systematically reviewed data about the effect of exogenous estrogens and progestogens on the course of migraine during reproductive age. Thereafter a consensus procedure among international experts was undertaken to develop statements to support clinical decision making, in terms of possible effects on migraine course of exogenous estrogens and progestogens and on possible treatment of headache associated with the use or with the withdrawal of hormones. Overall, quality of current evidence is low. Recommendations are provided for all the compounds with available evidence including the conventional 21/7 combined hormonal contraception, the desogestrel only oral pill, combined oral contraceptives with shortened pill-free interval, combined oral contraceptive with estradiol supplementation during the pill-free interval, extended regimen of combined hormonal contraceptive with pill or patch, combined hormonal contraceptive vaginal ring, transdermal estradiol supplementation with gel, transdermal estradiol supplementation with patch, subcutaneous estrogen implant with cyclical oral progestogen. As the quality of available data is poor, further research is needed on this topic to improve the knowledge about the use of estrogens and progestogens in women with migraine. There is a need for better management of headaches related to the use of hormones or their withdrawal.

Curr Vasc Pharmacol. 2018 Aug 28. doi: 10.2174/1570161116666180828154006. [Epub ahead of print] Cardiovascular risk in postmenopausal women with polycystic ovary syndrome. Lambrinoudaki I, Armeni E.

Polycystic ovary syndrome (PCOS) is one of the most common endocrinopathies affecting women of reproductive age. The hormonal alterations of PCOS have been linked with a higher risk of metabolic disturbances in young, reproductively active women. However, it remains to be clarified whether the presence of PCOS increases the risk of cardiovascular disease (CVD) later in life. Aging ameliorates the clinical manifestations of PCOS; hyperandrogenaemia and metabolic abnormalities, however, persist beyond the menopause. On the other hand, aging and menopause increase CVD risk in the general female population. The results of the limited available studies in aging women with a previous diagnosis of PCOS demonstrate early atherosclerosis. However, studies addressing clinical CVD outcomes in women with PCOS report inconsistent findings. A possible explanation for this heterogeneity is the difficulty in diagnosing PCOS after the menopausal transition, due to the absence of validated diagnostic criteria for this population. Larger prospective studies of women diagnosed during their reproductive years will shed more light on the longer-term CVD implications of PCOS.

J Clin Invest. 2018 Aug 28. pii: 122151. doi: 10.1172/JCI122151. [Epub ahead of print]

Sympathetic  $\beta$ 1-adrenergic signaling contributes to regulation of human bone metabolism.

Khosla S, Drake MT, Volkman TL, Thicke BS, Achenbach SJ, Atkinson EJ, Joyner MJ, Rosen CJ, et al.

BACKGROUND: Evidence from rodent studies indicates that the sympathetic nervous system (SNS) regulates bone metabolism, principally via  $\beta$ 2-adrenergic receptors ( $\beta$ 2-ARs). Given conflicting human data, we used multiple approaches to evaluate the role of the SNS in regulating human bone metabolism. METHODS: (1) Bone biopsies were obtained from 19 young and 19 old women for assessment of ADRB1, ADRB2, and ADRB3 mRNA expression; (2) the relationship of  $\beta$ -blocker use to bone microarchitecture was assessed by high resolution-peripheral quantitative computed tomography in a population sample of 248 subjects; and (3) 155 postmenopausal women were randomized to one of five treatment groups for 20 weeks: placebo; propranolol, 20 mg twice a day (BID); propranolol, 40 mg BID; atenolol, 50 mg/d; and nebivolol, 5 mg/d. We took advantage of the  $\beta$ 1-AR selectivity gradient of these drugs (propranolol [non-selective] << atenolol [relatively  $\beta$ 1-AR selective] to define the  $\beta$ -AR selectivity for SNS effects on bone. RESULTS: (1) ADRB1 and

ADRB2, but not ADRB3, were expressed in human bone; (2) patients treated clinically with  $\beta$ 1-AR selective blockers had better bone microarchitecture than non-users; and (3) relative to placebo, atenolol and nebivolol, but not propranolol, reduced the bone resorption marker serum C-telopeptide of type I collagen (by 19.5% and 20.6%, respectively; P < 0.01) and increased ultra-distal radius BMD (by 3.6% and 2.9%; P < 0.01 and P < 0.05, respectively). CONCLUSIONS: These three independent lines of evidence strongly support a role for adrenergic signaling in regulating bone metabolism in humans, principally via  $\beta$ 1-ARs.

Prz Menopauzalny. 2018 Jun;17(2):53-56. doi: 10.5114/pm.2018.77301. Epub 2018 Jun 30.

Perimenopause vasomotor symptoms, coronary atherosclerosis and risk of myocardial infarction during menopause: the cardiologist's perspective.

Savonitto S, Ferri LA, Colombo D.

Myocardial infarction (MI) is rare in pre-menopausal women, and in most cases has a gender-specific pathogenesis. After menopause, MI incidence increases gradually to equalize men's rate in the eighth decade of age, with similar pathogenesis. This epidemiological observation has raised a number of hypotheses on the protective effect of estrogen against atherosclerosis and its related diseases. However, MI has a multifactorial pathogenesis with variable contributions of inflammation, eroded or ruptured atherosclerotic plaques, vasoconstriction and thrombosis. Whether perimenopausal vasomotor symptoms are associated with a better, worse or neutral effect on the risk of myocardial infarction has long been disputed. The recent finding of the LADIES ACS study that women reporting transitional vasomotor symptoms have earlier onset myocardial infarction, as compared to women without symptoms, despite similar risk factors and extent of coronary angiographic disease, supports the hypothesis that endothelial dysfunction, or other vasoconstrictive mechanisms, may play a key role in precipitating an acute coronary syndrome at an earlier age. These factors, rather than other atherosclerotic markers, should be specifically investigated in order to elucidate the so far elusive link between vasomotor symptoms and risk of MI.

Clin Genitourin Cancer. 2018 Jul 21. pii: S1558-7673(18)30203-9. doi: 10.1016/j.clgc.2018.07.016. [Epub ahead of print]

Effect of Diphosphonates on Bone Mineral Density in Men Receiving Androgen Deprivation Therapy for Prostate Cancer.

Wu C, Chen W, Huang X, Lin R, Wu J, Zhang X.

Patients receiving androgen deprivation therapy are associated with increasing loss of bone mineral density (BMD) and higher risk of skeletal-related events. We reviewed and analyzed the influence of diphosphonates on BMD change. A systemic literature research was conducted in PubMed and related bibliographies. The focus of data extraction was BMD percentage change of lumbar spine, total hip, and femoral neck after 12 months. Standardized mean difference (SMD) was pooled with the random-effects model, and metaregression and subgroup analysis were performed to explore heterogeneity. Nine articles (n = 920) were included and finally analyzed after screening 118 articles. We found significant improvement in BMD percentage changes of the lumbar spine, total hip, and femoral neck at 1 year (respectively, SMD = 6.379, 95% confidence interval [CI] = 3.740-9.018, P < .001, I2 = 98.8%, P < .001; SMD = 4.870, 95% CI, 2.256-7.485, P < .001, I2 = 98.9%, P < .001; SMD = 3.634, 95% CI, 1.989-5.279, P < .001, I2 = 97.3%, P < .001). In individual variable metaregression analysis, application zoledronic acid or not showed a statistically significant influence on BMD percentage change of total hip (P = .018). In subgroup analyses, both zoledronic acid and alendronate showed a significant improvement in BMD percentage changes. Diphosphonates significantly increased BMD percentage changes of the lumbar spine, total hip, and femoral neck in men receiving androgen deprivation therapy for prostate cancer. Patients with androgen deprivation therapy should be evaluated BMD loss, and timely therapy with diphosphonates may be an appropriate strategy to prevent osteoporosis.