

## Selección de Resúmenes de Menopausia

Semana del 16 al 22 de febrero 2022 María Soledad Valleio, Clínica Ouilín, Universidad de Chile

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### Clinical evaluation of autologous platelet rich plasma injection in post menopausal vulvovaginal atrophy: A pilot study

Doaa M Saleh 1 2, Rania Abdelghani 1 2

Background: There is lack of published data investigating injection of autologous platelet rich plasma (A-PRP) alone in treatment of postmenopausal VVA. Objectives: In this pilot study, we aimed to investigate the safety and efficacy of injection of A-PRP alone in postmenopausal VVA in women without history of cancer breast to explore its utility as a hormone free therapy for postmenopausal VVA and for vulvovaginal rejuvenation. Methods: In this pilot study, 47 women with postmenopausal VVA were included. Vulvoyaginal condition was evaluated at the baseline by vaginal health index (VHI). Impact of VVA on quality of life and sexual life was evaluated at the baseline by vulvovaginal symptom questionnaire (VSQ). Treatment protocol was 2 sessions of A-PRP injection with one month interval. Response was evaluated one month after the last session by VHI and VSO. Side effects were also evaluated. Results: Post menopausal VVA was significantly improved by A-PRP injection as indicated by significant improvement of total VHI score and its items at 1 month post treatment (p ylue < 0.001). Also, there was significant improvement of burning. hurting, being irritated, being dry, discharge, desire to be intimate, sexual relationships, pain during sexual activity, and dryness during sexual activity at 1 month post treatment as indicated by VSQ (p value = 0.045 for being dry and < 0.001 for other items). Conclusions: A-PRP injection is safe and effective as minimally invasive monotherapy for postmenopausal VVA without history of cancer breast and hence for vulvoyaginal rejuvenation.

# Rev Int Androl. 2022 Feb 18;S1698-031X(22)00016-4. doi: 10.1016/j.androl.2020.12.004. Online ahead of print. Comparison of sexual function between women with iatrogenic and natural

Introduction: Menopause refers to the permanent cessation of menstruation resulting from the loss of ovarian activity. Studies have shown that menopause has an impact on the life quality of women as well as their sexual function. In this study, we sought to characterise the differences in the sexual function of women with iatrogenic menopause and those with natural menopause. Methods: Data were collected from 300 women in this study. The Symptom Check List and the Female Sexual Function Index were the main data collection instruments. Forty-eight patients with a Symptom Check List score ≥0.5 were not included in the study. Therefore, we enrolled a cohort of 252 menopausal women at a tertiary care setting in Turkey. The independent sample t-test, one-way analysis of variance, Pearson correlation and logistic regression analysis were used in this study and p value of <0.05 was considered statistically significant. Results: In our study, menopause women were divided into two equal groups based on the type of menopause (natural vs. iatrogenic). The iatrogenic group was further divided into 3 sub-groups; drug-induced 30 (12%), radiotherapy-induced 18 (7%) and surgical 78 (31%). No significant difference in sexual function between groups were observed with respect to mean scores for desire, arousal, lubrication, orgasm, satisfaction, pain and sexual function (p>0.05). Conclusions: Our results suggest that sexuality-specific problems during menopause are multifactorial and not solely attributable to biological or psychological factors. Our findings call for comprehensive interventions to address the psychological and biological effects of menopause in order to improve the life quality of women.

# Calcif Tissue Int. 2022 Feb 19. doi: 10.1007/s00223-022-00959-z. Online ahead of print. Micro-RNA: A Future Approach to Personalized Diagnosis of Bone Diseases

Giovanni Lombardi 1 2, Edgard Delvin 3

Osteoporosis is a highly prevalent bone disease worldwide and the most studied bone-associated pathological condition. Although its diagnosis makes use of advanced and clinically relevant imaging and biochemical tools, the information suffers from several limitations and has little or no prognostic value. In this context, circulating micro-RNAs represent a potentially attractive alternative or a useful addition to the diagnostic arsenal and offer a greater prognostic potential than the conventional approaches. These short non-coding RNA molecules act as inhibitors of gene expression by

targeting messenger RNAs with different degrees of complementarity, establishing a complex multilevel network, the basis for the fine modulation of gene expression that finally regulates every single activity of a cell. Micro-RNAs may passively and/or actively be released in the circulation by source cells, and being measurable in biological fluids, their concentrations may be associated to specific pathophysiological conditions. Mounting, despite debatable, evidence supports the use of micro-RNAs as markers of bone cell metabolic activity and bone diseases. Indeed, several micro-RNAs have been associated with bone mineral density, fractures and osteoporosis. However, concerns such as absence of comparability between studies and, the lack of standardization and harmonization of the methods, limit their application. In this review, we describe the pathophysiological bases of the association between micro-RNAs and the deregulation of bone cells activity and the processes that led to the identification of potential micro-RNA-based markers associated with metabolic bone diseases.

#### Osteoporos Int. 2022 Feb 17. doi: 10.1007/s00198-022-06325-x. Online ahead of print.

# Prediabetes and insulin resistance are associated with lower trabecular bone score (TBS): cross-sectional results from the Study of Women's Health Across the Nation TBS Study

Albert Shieh 1, Gail A Greendale 2, Jane A Cauley 3, Carrie Karvonen-Gutierriez 4, Sioban D Harlow 4, et al. In pre- and early perimenopausal women, prediabetes (with blood glucose ≥ 110 mg/dL) and greater insulin resistance are associated with worse trabecular bone quality (as assessed by trabecular bone score). Purpose: Diabetes mellitus (DM) is associated with lower trabecular bone score (TBS) and fracture; less certain is whether the precursor states of prediabetes and increased insulin resistance are also related to adverse bone outcomes. We examined, in women who do not have DM, the associations of glycemic status (prediabetes vs. normal) and insulin resistance with TBS. Methods: This was a cross-sectional analysis of baseline data collected from 42- to 52-year-old, pre- and perimenopausal participants in the Study of Women's Health Across the Nation (SWAN) TBS Study. Women with prediabetes were categorized as having either high prediabetes if their fasting glucose was between 110 and 125 mg/dL or low prediabetes if their fasting glucose was between 100 and 109 mg/dL. Normoglycemia was defined as a fasting glucose below 100 mg/dL. Results: In multivariable linear regression, adjusted for age, race/ethnicity, menopause transition stage, cigarette use, calcium and vitamin D supplementation, lumbar spine bone mineral density, and study site, women with high prediabetes had 0.21 (p < 0.0001) standard deviations (SD) lower TBS than those with normoglycemia. Low prediabetes was not associated with lower TBS. When HOMA-IR levels were ≥ 1.62, each doubling of HOMA-IR was associated with a 0.11 SD decrement in TBS (p = 0.0001). Conclusion: Similar to diabetics, high prediabetics have lower TBS than normoglycemic individuals. Women with greater insulin resistance have lower TBS even in the absence of DM. Future studies should examine the associations of high prediabetes and insulin resistance with incident fracture.

#### BMJ Open. 2022 Feb 14;12(2):e053032. doi: 10.1136/bmjopen-2021-053032.

# Association between pharmaceutical modulation of oestrogen in postmenopausal women in Sweden and death due to COVID-19: a cohort study

Malin Sund 1 2, Osvaldo Fonseca-Rodríguez 3, Andreas Josefsson 1 4 5, Karin Welen 4, Anne-Marie Fors Connolly Objective: Determine whether augmentation of oestrogen in postmenopausal women decreases the risk of death following COVID-19. Design: Nationwide registry-based study in Sweden based on registries from the Swedish Public Health Agency (all individuals who tested positive for SARS-CoV-2); Statistics Sweden (socioeconomical variables) and the National Board of Health and Welfare (causes of death), Participants; Postmenopausal women between 50 and 80 years of age with verified COVID-19. Interventions: Pharmaceutical modulation of oestrogen as defined by (1) women with previously diagnosed breast cancer and receiving endocrine therapy (decreased systemic oestrogen levels); (2) women receiving hormone replacement therapy (increased systemic oestrogen levels) and (3) a control group not fulfilling requirements for group 1 or 2 (postmenopausal oestrogen levels). Adjustments were made for potential confounders such as age, annual disposable income (richest group as the reference category), highest level of education (primary, secondary and tertiary (reference)) and the weighted Charlson Comorbidity Index (wCCI). Primary outcome measure: Death following COVID-19. Results: From a nationwide cohort consisting of 49 853 women diagnosed with COVID-19 between 4 February and 14 September 2020 in Sweden, 16 693 were between 50 and 80 years of age. We included 14 685 women in the study with 11 923 (81%) in the control group, 227 (2%) women in group 1 and 2535 (17%) women in group 2. The unadjusted ORs for death following COVID-19 were 2.35 (95% CI 1.51 to 3.65) for group 1 and 0.45 (0.34 to 0.6) for group 2. Only the adjusted OR for death remained significant for group 2 with OR

0.47 (0.34 to 0.63). Absolute risk of death was 4.6% for the control group vs 10.1% and 2.1%, for the decreased and increased oestrogen groups, respectively. The risk of death due to COVID-19 was significantly associated with: age, OR 1.15 (1.14 to 1.17); annual income, poorest 2.79 (1.96 to 3.97), poor 2.43 (91.71 to 3.46) and middle 1.64 (1.11 to 2.41); and education (primary 1.4 (1.07 to 1.81)) and wCCI 1.13 (1.1 to 1.16). Conclusions: Oestrogen supplementation in postmenopausal women is associated with a decreased risk of dying from COVID-19 in this nationwide cohort study. These findings are limited by the retrospective and non-randomised design. Further randomised intervention trials are warranted.