

### Selección de Resúmenes de Menopausia

Semana del 19 al 25 de mayo 2021 María Soledad Vallejo. Clínica Quilín. Universidad de Chile

 $Gynecol\ Endocrinol.\ 2021\ May\ 21; 1-6. doi:\ 10.1080/09513590.2021.1929150.\ Online\ ahead\ of\ print.$ 

### A higher quality of life by the Cervantes Short-Form Scale is related to a better sexual desire in postmenopausal women

Maria Fasero, Ana Rosa Jurado-López, Carlos San Martín-Blanco, David Varillas-Delgado 2, Pluvio J Coronado 5 Objective: Evaluate the association between health relate quality of life and sexual desire in postmenopausal women and the influence of demographic descriptors on sexual desire. Methods: A observational-cross-sectional study was conducted in 521 postmenopausal women in La Zarzuela Hospital between 2018-2020. Cervantes-short form (Cervantes-SF) scale and Brief profile female sexual function (B-PFSF) scale were filled out in the consultation. High score in Cervantes-SF implies worse health-related quality of life (HR-QoL). If score is lower or equal to 20 in B-PFSF implies diagnosis of hypoactive sexual desire disorder. Results: There is a positive relationship between HR-QoL measured by Cervantes-SF and sexual desire measured by B-PFSF (p < .001; correlation coefficient: .223). The mean score on Cervantes-SF was  $30.8 \pm 14.9$  and on B-PFSF was  $18.7 \pm 7.4$ . The B-PFSF score was worse in those women using systemic or vaginal hormonal treatment versus using non-hormonal treatment (18.7  $\pm$  7.8 or 17.2  $\pm$  7.4 vs  $19.7 \pm 6.5$ ; p = .033. Smoking (b exp: .384; p = .029) and using vaginal hormonal treatment (b exp: 1.759; p = .033) are independent factors related to sexual desire. No difference was found in the wellbeing perceived by women in the different treatments (mean of minimal clinically important difference score was 2.9 in systemic vs. 3.0 in vaginal hormonal treatment). Conclusions: Improvement on HR-QoL is related to improvement on sexual desire. Sexual desire is better in women with non-hormonal treatment than in women with systemic or vaginal hormonal treatment. The vaginal hormonal treatment and being current smoker are independent factors of low and high sexual desire, respectively.

### Calcif Tissue Int. 2021 May 20.doi: 10.1007/s00223-021-00865-w. Online ahead of print.

## The Predictability of Frailty Associated with Musculoskeletal Deficits: A Longitudinal Study

Monica C Tembo, Mohammadreza Mohebbi, Kara L Holloway-Kew, James Gaston, Sharon L Brennan-Olsen, et al. We investigated and quantified the predictability of frailty associated with musculoskeletal parameters. This longitudinal study included 287 men aged ≥ 50 yr at baseline (2001-2006) from the Geelong Osteoporosis Study. Baseline musculoskeletal measures included femoral neck bone mineral density (BMD), appendicular lean mass index (ALMI, kg/m2) and whole-body fat mass index (FMI, kg/m2) and lower-limb strength. Frailty at the 15 yr-follow-up (2016-2019) was defined as  $\geq 3$  and non-frail as < 3, of the following: unintentional weight loss, weakness, low physical activity, exhaustion, and slowness. Binary regression models and AUROC curves quantified the attributable risk of musculoskeletal factors to frailty and their predictive ability. Potential confounders included anthropometry, smoking, alcohol, FMI, socioeconomic status and comorbidities. Forty-eight (16.7%) men were frail at 15 yr-follow-up. Musculoskeletal models were better predictors of frailty compared to the referent (confounders only) model (AUROC for musculoskeletal factors 0.74 vs 0.67 for the referent model). The model with the highest AUROC (0.74; 95% CI 0.66-0.82) included BMD, ALMI and muscle strength (hip abductors) and was better than the referent model that included only lifestyle factors (p = 0.046). Musculoskeletal parameters improved the predictability model as measured by AUROC for frailty after 15 years. In general, muscle models performed better compared to bone models. Musculoskeletal parameters improved the predictability of frailty of the referent model that included lifestyle factors. Muscle deficits accounted for a greater proportion of the risk for frailty than did bone deficits. Targeting musculoskeletal health could be a possible avenue of intervention in regards to frailty.

Arch Osteoporos. 2021 May 19;16(1):79.doi: 10.1007/s11657-021-00927-4.

Osteoporosis was associated with severe abdominal aortic calcification based on a cross-sectional study

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Introduction: Abdominal aortic calcification (AAC) and osteoporosis are age-related diseases and share similar pathological mechanisms. However, the association between osteoporosis and AAC is uncertain. Methods: A total of 3134 participants with complete record of AAC score calculated from dual-energy X-ray absorptiometry (DXA) were enrolled from the National Health and Nutrition Examination Survey (NHANES) 2013-2014. The diagnosis of osteoporosis was obtained from self-reported interview. The baseline covariates were compared between participants with and without osteoporosis. Multivariable logistic regression was performed to examine the association between abdominal aortic calcification and osteoporosis. Results: Compared with those without osteoporosis, participants with osteoporosis had higher AAC scores. Osteoporosis was positively associated with higher odds of severe AAC (OR = 2.65; 95%CI, 1.89-3.71; P < 0.001), and the association was not altered (OR = 2.17; 95%CI, 1.23-3.83; P = 0.008) after adjusting for numerous covariates. Conclusions: Our findings suggest that osteoporosis may be independently associated with severe abdominal aortic calcification.

#### Medicine (Baltimore). 2021 May 21;100(20):e26061.doi: 10.1097/MD.000000000026061.

# Alterations of bone markers in obese patients with type 2 diabetes after bariatric surgery: A meta-analysis and systemic review of randomized controlled trials and cohorts

Tzu-Wen Huang, Jing-Yi Chen, Yueh-Lin Wu, Chih-Chin Kao, Shu-Ching Yeh, Yen-Chung Lin.

Background: The aim of this study is to evaluate the alterations in bone mineral density and other surrogate markers for osteoporosis in obese patients with type 2 diabetes mellitus (T2DM) who received Roux-en-Y gastric bypass (RYGB) versus medical treatment as control. Methods: We searched 4 electronic databases and reference lists of relevant studies for eligible research published before December, 2019. After quality assessment, eligible studies were synthesized for relevant outcomes, including lumbar spine bone mineral density (L-spine BMD) change, total hip BMD change, osteocalcin level, C-terminal telopeptide level, and parathyroid hormone level. Results: Three randomized clinical trials and 2 observational studies concerning 307 total obese T2DM patients were included. Follow-up ranged from 12 to 60 months. Patients underwent RYGB surgery were associated with both higher L-spine BMD loss (mean difference: -2.90, 95% CI: -2.99~-2.81, P < .00001) and total hip BMD loss (mean difference: -5.81, 95% CI: -9.22~-2.40, P = .0008). As to biochemical markers of bone metabolism, we found significantly higher osteocalcin level in medical treatment (control) group compared with RYGB group (mean difference: 11.16, 95% CI: 8.57-13.75, P < .00001). However, higher C-terminal telopeptide level and parathyroid hormone level were noted in medical treatment group (control) compared with RYGB group (mean difference: 0.29, 95% CI: 0.11-0.48, P = .002; mean difference: 1.56, 95% CI: 0.84-2.27, P < .0001). Conclusions: RYGB surgery is associated with negative impact on bone metabolism and increase the risk of osteoporosis in obese patients with T2DM. We suggest that clinicians acknowledge the adverse effects of surgery and keep monitoring bone mineral components in post-RYGB populations. Further studies regarding the optimal amount of perioperative and postsurgical supplementation should be evaluated.

## Curr Opin Endocrinol Diabetes Obes. 2021 May 19.doi: 10.1097/MED.000000000000000645. A ahead of print. Treatment of bone fragility in patients with diabetes: antiresorptive versus anabolic?

Meghna Shah 1, Anusha Veeravanallur Appuswamy, Sudhaker D Rao, Ruban Dhaliwal

Purpose of review: The pathogenesis of bone fragility in diabetes has not been fully characterized. The antifracture efficacy of available therapies remains unproven in patients with diabetes. We aim to collate current evidence of the treatment of diabetic bone fragility, and to provide a rationale for considering optimal therapeutic option in patients with diabetes. Recent findings: The antifracture efficacy of antiresorptive and anabolic therapies is well established in patients without diabetes. Studies in patients with osteoporosis have shown that anabolic therapies lead to faster and larger benefits to bone mineral density and offer greater protection against fracture than antiresorptive therapies. Available data suggest that antiresorptive and anabolic therapies have similar effect on bone density and fracture risk reduction in patients with and without diabetes. However, the evidence in diabetes is limited to observational studies and post hoc analyses of osteoporosis studies. Summary: There are no specific guidelines for the treatment of bone fragility in patients with diabetes. We offer a rationale for use of anabolic therapies in diabetes which is a low bone formation state, in contrast to postmenopausal osteoporosis that is characterized by increased bone turnover. Prospective studies evaluating the effect of available therapies on bone quality and fracture outcomes in patients with diabetes are needed.

Endocrine. 2021 May 17;1-7.doi: 10.1007/s12020-021-02749-3. Online ahead of print.

## Vitamin D in the Covid-19 era: a review with recommendations from a G.I.O.S.E.G. expert panel

Fabio Massimo Ulivieri 1, Giuseppe Banfi 2 3, Valentina Camozzi 4, Annamaria Colao 5, et al-Reaching an adequate VITD status in the population is a good clinical practice to prevent extra-skeletal adverse effects of low VITD levels, which may interfere negatively with the course of COVID-19. In a long term-scenario of COVID-19 era, public Health Authorities should prospect at widespread food fortification projects with VITD, to preserve the positive extra-skeletal effects of VITD.In the short-term scenario of COVID-19 era we think that public Health Authorities and Scientific S cieties should team up to identify subjects with increased risk for complications or death from COVID-19 in whom VITD supplementation is mandatory, due to its alleged or proved deficiency. In the COVID-19 pandemic conditions, we believe that these recommendations should become shared measures to be added to vaccination plans. On the other hand, we think there is not enough evidence to routinely add VITD to the treatment protocols in COVID-19 hospitalised patients.

#### Climacteric. 2021 May 19;1-10.doi: 10.1080/13697137.2021.1918079. Online ahead of print.

### Clinical impact of misinterpretation of dual-energy X-ray absorptiometry during the evaluation of osteoporotic patients

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Osteoporosis is a highly prevalent systemic skeletal disorder leading to decreased bone strength and increased susceptibility to fragility fracture. The global burden of osteoporosis negatively impacts health systems around the world, and the estimation of millions of individuals at high risk for fracture in 2010 will double by the year 2040. There are many techniques to evaluate bone mineral density, but the preferred method in clinical practice is dual-energy X-ray absorptiometry (DXA). This method, despite offering multiple advantages, can lead us to a wrong diagnosis if we do not take into account certain clinical and technical considerations. The objective of this review is to analyze the different aspects that we must consider when, as clinicians, we have to evaluate a densitometric report. These aspects are presented as technical factors influencing DXA results and patients' conditions limiting DXA interpretation.