Selección de Resúmenes de Menopausia

Semana del 9 al 15 de diciembre, 2020

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Impact of body mass index on overall survival in patients with metastatic breast cancer

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Background: High Body mass index (BMI) is a risk factor for breast cancer among postmenopausal women and an adverse prognostic factor in early-stage. Little is known about its impact on clinical outcomes in patients with metastatic breast cancer (MBC). Methods: The National ESME-MBC observational cohort includes all consecutive patients newly diagnosed with MBC between Jan 2008 and Dec 2016 in the 18 French comprehensive cancer centers. Results: Of 22 463 patients in ESME-MBC, 12 999 women had BMI data available at MBC diagnosis. Median BMI was 24.9 kg/m2 (range 12.1-66.5); 20% of women were obese and 5% underweight. Obesity was associated with more de novo MBC, while underweight patients had more aggressive cancer features. Median overall survival (OS) of the BMI cohort was 47.4 months (95% CI [46.2-48.5]) (median follow-up: 48.6 months). Underweight was independently associated with a worse OS (median OS 33 months; HR 1.14, 95%CI, 1.02-1.27) and first line progression-free survival (HR, 1.11; 95%CI, 1.01; 1.22), while overweight or obesity had no effect. Conclusion: Overweight and obesity are not associated with poorer outcomes in women with metastatic disease, while underweight appears as an independent adverse prognostic factor.

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Musculoskeletal Pain during the Menopausal Transition: A Systematic Review and Meta-Analysis

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Musculoskeletal pain (MSP) is one of the most severe complaints in women undergoing menopause. The prevalence of MSP varied when taking the menopausal state and age factor into consideration. This study investigated the prevalence of MSP in perimenopausal women and its association with menopausal state. The MEDLINE, Embase, Web of Science, and PubMed databases were searched from inception to July 2020, and 16 studies were retrieved for the current meta-analysis. The primary outcome measure was the MSP Odds Ratio (OR). The estimated overall prevalence of MSP among perimenopausal women was 71% (4144 out of 5836, 95% confidence interval (CI): 64%-78%). Perimenopausal women demonstrated a higher risk for MSP than premenopausal ones (OR: 1.63, 95% CI: 1.35-1.96, P = 0.008, I 2 = 59.7%), but similar to that in postmenopausal ones (OR: 1.07, 95% CI: 0.95-1.20, P = 0.316, I 2 = 13.4%). The postmenopausal women were at a higher risk of moderate/severe MSP than the premenopausal ones (OR: 1.45, 95% CI: 1.21-1.75, P = 0.302, I 2 = 16.5%) or the perimenopausal ones (OR: 1.40, 95% CI: 1.09-1.79, P = 0.106, I 2 = 55.4%). In conclusion, the perimenopause is a state during which women are particularly predisposed to develop MSP. As to moderate to severe degrees of MSP, the odds increase linearly with age, from premenopause to peri- and then to postmenopause.

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Efficacy and safety of current therapies for genitourinary syndrome of menopause: A Bayesian network analysis of 29 randomized trials and 8311 patients

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Genitourinary syndrome of menopause (GSM) seriously affects the quality of life of women in this stage and patients with breast cancer, but optimal treatment options as well as risks associated with the complication remain controversial. We aimed at exploring the safest and most effective treatment for genitourinary syndrome of menopause. The study was performed following a pre-established protocol registered on PROSPERO (CRD42020180807). We searched through PubMed, Embase, Scopus, Cochrane Library, Web of Science and ScienceDirect electronic databases, clinicaltrials.gov and OVID for relevant data on Genitourinary syndrome of menopause provided by March 2020. Randomised controlled

trials (RCTs) on women presenting with some or all the signs and symptoms for genitourinary syndrome of menopause were extracted and analyzed based on the Bayesian theory. The key variables were additionally evaluated using the network sub-analyses, standard pairwise comparisons, regression analysis and subgroup and sensitivity analyses. The pooled estimates were quantified as odd ratios or mean differences where appropriate, at 95% confidence intervals. In the end, 29 randomized controlled trials (RCTs) evaluating 5 different treatment regimens for genitourinary syndrome of menopause, involving 8311 patients, were included in the study. Laser therapy had excellent effect on vaginal dryness, dysparunia, urinary incontinence, proportion of parabasal cells, pH and VHI. Vaginal estrogen also had significant effects on these aspects, although its effect was inferior to that of laser therapy. Ospemifene therapy was however superior to laser and vaginal estrogen therapies in ameliorating sexual function, however, it presents a high risk of developing adverse events and endometrial hyperplasia. Moisturizer/lubricant was effective on dysparunia, proportion of parabasal cells and vaginal pH. In regression analysis, age was an essential factor affecting vaginal dryness and pH treatment effect. Compared with other currently available interventional treatments for genitourinary syndrome of menopause, laser therapy, followed by vaginal estrogen, confers superior clinical outcomes for most aspects associated with the disease. In addition, they pose relatively low risks of developing adverse events. Ospemifene and DHEA therapies on their part significantly improve sexual function of women with GSM. A strong relationship between treatment effect and age provides insights for future studies on clinical treatment.

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Effects of menstrual cycle and menopause on internal carotid artery shear-mediated dilation in women

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This study aimed to elucidate the effects of change in estrogen during the menstrual cycle and menopause on shear-mediated dilation of the internal carotid artery (ICA), a potential index of cerebrovascular endothelial function. Shear-mediated dilation of the ICA and serum estradiol were measured in 11 premenopausal (Pre-M, 21±1yrs), 13 perimenopausal (Peri-M, 49±2yrs), and 10 postmenopausal (Post-M, 65±7yrs) women. Measurements were made twice within the Pre-M group at their early follicular (EF, lower estradiol) and late follicular (LF, higher estradiol) phases. Shear-mediated dilation was induced by 3min of hypercapnia (target PETCO2 +10mmHg from individual baseline) and was calculated as the percent rise in peak diameter relative to baseline diameter. ICA diameter and blood velocity were simultaneously measured by Doppler ultrasound. In Pre-M, shear-mediated dilation was higher during the LF phase than during the EF phase (P<0.01). Comparing all groups, shear-mediated dilation was reduced across the menopausal transition (P<0.01), and Pre-M during the LF phase showed the highest value (8.9±1.4%) compared with other groups (Pre-M in EF, 6.4±1.1%; Peri-M, 5.5±1.3%; Post-M, 5.2±1.9%, P<0.05 for all). Shear-mediated dilation was positively correlated with serum estradiol even after adjustment of age (P<0.01, r=0.55, age-adjusted; P=0.02, r=0.35). Collectively, these data indicate that controlling the menstrual cycle phase is necessary for the cross-sectional assessments of shear-mediated dilation of the ICA in premenopausal women. Moreover, current findings suggest that a decline in cerebrovascular endothelial function may be partly related to the reduced circulating estrogen levels in peri- and postmenopausal women.

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Evaluation of FRAX Performance Without Bone Mineral Density Calibrated for Mexico to Recognize Women at Risk of Fragility Fractures in Routine Clinical Care

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Objective: To evaluate FRAX clinical performance without bone mineral density (BMD) to approach people with fracture risk. Methods: A cross-sectional study was carried out from July 2012 to February 2020 at outpatient clinic of rheumatology in 2 public hospitals. Postmenopausal women between 40 and 90 years of age were chosen if no previous osteoporosis treatment was received and had femoral neck BMD determination. Clinical performance of FRAX without BMD was evaluated using agreement and diagnostic test statistics. Results: Four hundred seventy-seven women with a mean age of 62.85 years were included. FRAX without BMD classified 46.03% of them at low risk, 45.82% intermediate risk, and 8.16% high risk. When BMD was included, 17.19% of them revealed high risk. Not incorporating BMD value in the risk assessed a higher percentage of error in the fracture risk classification in high-risk patients; otherwise, including BMD reclassified it as risk below treatment threshold in 20.51% of the patients. The percentage of agreement

between the recommendations based on FRAX with and without BMD was 94.98%. Agreement between FRAX score with or without BMD was good to very good (κ = 0.79, Gwet = 0.93). FRAX without BMD presented a positive predictive value of 79.5% and negative predictive value of 97.7%. Conclusions: FRAX without BMD correctly classified most women evaluated, primarily low-risk women. In order to identify accurately women at high fracture risk, it would be advisable to determine the BMD in women with moderate to high risk of FRAX without BMD.

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Impact of Hormonal Replacement Therapy on Bone Mineral Density in Premature Ovarian Insufficiency Patients

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Premature ovarian insufficiency (POI) is a type of hypergonadotropic hypogonadism caused by impaired ovarian function before the age of 40. Due to the hypoestrogenism, women with POI experience a variety of health complications, including an increased risk of bone mineral density loss and developing osteopenia and osteoporosis, which poses an important problem for public health. Purpose: The aim of this study was to evaluate and compare the values of bone mineral density (BMD), T-score and Z-score within the lumbar spine (L1-L4) using the dual energy X-ray absorptiometry method. The dual-energy X-ray absorptiometry (DXA) scans described in this original prospective article were performed at the time of POI diagnosis and after treatment with sequential hormone replacement therapy (HRT). Materials and methods: This study included 132 patients with a mean age of 31.86 ± 7.75 years who had been diagnosed with idiopathic POI. The control group consisted of 17 healthy women with regular menstrual cycles, with a mean age of 23.21 ± 5.86 years. Serum follicle-stimulating hormone (FSH), luteinizing hormone (LH), 17-estradiol (E2), prolactin (PRL), testosterone (T), dehydroepiandrosterone sulfate (DHEA-S), thyroid-stimulating hormone (TSH), free thyroxine (fT4), insulin, and fasting serum glucose were measured. Lumbar spine (L1-L4) BMD was assessed by means of dual-energy X-ray absorptiometry. DXA scans were performed at the time of diagnosis and following treatment with sequential hormone replacement therapy (HRT) comprised of daily oral 2 mg 17-β-estradiol and 10 mg dydrogesterone. The mean time of observation was 3 ± 2 years. Results: Patients in the POI group presented with characteristic hypergonadotropic hypogonadism. They had a significantly decreased mean lumbar spine BMD when compared to healthy controls (1.088 ± 0.14 g/cm2) vs. 1.150 ± 0.30 g/cm2) ($p = 0.04$) as well as a decreased T-score (0.75 ± 1.167 vs. -0.144 ± 0.82) ($p = 003$). There was a significant increase in BMD (1.088 ± 0.14 vs. 1.109 ± 0.14; $p < 0.001$), T-score (-0.75 ± 1.17 vs. -0.59 ± 1.22; $p < 0.001$), and Z-score (-0.75 ± 1.12 vs. -0.49 ± 1.11; $p < 0.001$) after the implementation of HRT when compared to pre-treatment results. Conclusions: In conclusion, this study has demonstrated that patients with POI often have decreased bone mineral density and that the implementation of HRT has a significant and positive influence on bone mass. The implementation of full-dose HRT and monitoring of bone status is particularly important in these patients.

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Effects of endogenous and exogenous oestrogen exposure on hearing level in postmenopausal women: A cross-sectional study

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Objective: To investigate the effect of endogenous and exogenous oestrogen exposure on hearing levels in postmenopausal women.Study design: Retrospective cross-sectional study. Setting: Population-based survey data collected by the Korean National Health and Nutrition Survey between 1 January 2010 and 31 December 2012. Subjects and methods: Participants comprised 3,653 postmenopausal women. Detailed histories for reproductive factors and data on the use of hormone replacement therapy were obtained through health questionnaires and otologic examinations, including pure-tone audiogram and otoscopic findings. Complex-sample linear regression models controlling for confounding factors were generated to determine whether hormone-related factors were associated with hearing loss. Results: Women who experienced a longer duration of oestrogen exposure had better hearing compared to those who do not in multivariate model adjusting for confounding factors with a lower adjusted beta coefficient of hearing threshold (β = -0.18, 95% confidence interval = -0.3 to -0.07, P = .002). The results also suggested that hormone replacement therapy may be beneficial for attenuating hearing loss (β = -1.22, 95% confidence interval = -2.19 to -0.25, P = .014), particularly in the high frequency range from 3 kHz to 6 KHz. Conclusion: A longer duration of lifetime oestrogen exposure (LEE) and the use of hormone replacement therapy are likely to attenuate hearing loss. These epidemiologic data provide evidence that oestrogen may be beneficial for attenuating age-related hearing decline.