Selección de Resúmenes de Menopausia

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Hormone-replacement therapy: current thinking.

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For several decades, the role of hormone-replacement therapy (HRT) has been debated. Early observational data on HRT showed many benefits, including a reduction in coronary heart disease (CHD) and mortality. More recently, randomized trials, including the Women's Health Initiative (WHI), studying mostly women many years after the the onset of menopause, showed no such benefit and, indeed, an increased risk of CHD and breast cancer, which led to an abrupt decrease in the use of HRT. Subsequent reanalyzes of data from the WHI with age stratification, newer randomized and observational data and several meta-analyses now consistently show reductions in CHD and mortality when HRT is initiated soon after menopause. HRT also significantly decreases the incidence of various symptoms of menopause and the risk of osteoporotic fractures, and improves quality of life. In younger healthy women (aged 50-60 years), the risk-benefit balance is positive for using HRT, with risks considered rare. As no validated primary prevention strategies are available for younger women (<60 years of age), other than lifestyle management, some consideration might be given to HRT as a prevention strategy as treatment can reduce CHD and all-cause mortality. Although HRT should be primarily oestrogen-based, no particular HRT regimen can be advocated.

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Celiac disease is associated with reduced bone mineral density and increased FRAX scores in the US National Health and Nutrition Examination Survey.

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We investigated the association between celiac disease (CD) and bone mass density (BMD) and risk of osteoporotic fractures in the general US population. In children and men ≥18 years, CD was associated with reduced BMD, and in men ≥40 years, CD was associated with increased risk of osteoporotic fractures. INTRODUCTION: Celiac disease (CD) is an autoimmune condition, characterized by inflammation of the small intestine. CD has an increasing prevalence, and if unrecognized or untreated, CD can lead to complications from malabsorption and micronutrient deficiencies. We aimed to study whether CD is an independent predictor of reduced bone mineral density (BMD) and FRAX scores in the general US population. METHODS: We used data from the National Health and Nutrition Examination Survey, 2009-2010 and 2013-2014. CD was defined by positive tissue transglutaminase IgA antibody test. Multivariable models of BMD and FRAX scores were adjusted for BMI, serum 25-hydroxyvitamin D, vitamin D and calcium supplements, milk intake, serum calcium, and smoking status, when available. RESULTS: In children, aged 8-17 years, CD was associated with decreased Z-scores, by 0.85 for hip and 0.46 for spine (both $P < 0.001$). In men aged ≥ 18 years, CD was associated with 0.06 g/cm2 decrease in BMD in hip and with 0.11 g/cm2 decrease in BMD in spine ($P = 0.08$ and $P < 0.001$, respectively). In women, there were no statistically significant differences in the multiple-adjusted model. In men aged ≥ 40 years, CD predicted FRAX scores, resulting in increased scores by 2.25 % ($P = 0.006$) for hip fracture and by 2.43 % ($P = 0.05$) for major osteoporotic fracture. CD did not predict FRAX scores in women aged ≥40 years. CONCLUSION: CD is independently associated with reduced BMD in children and adults aged ≥18 years and is an independent risk factor of osteoporotic fractures in men aged ≥40 years.

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Increasing body fat mass reverses bone loss in osteopenia as detected by dual-energy X-ray absorptiometry scans.

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OBJECTIVE: Low body mass index (BMI) is a known risk factor for osteoporosis and is part of the FRAX™ 10-year fracture risk stratification tool for predicting fragility fractures. Little is known regarding the effects of changing body composition on bone mineral density (BMD). However, increasing fat mass (FM) improves BMD in young

women with anorexia nervosa. This study aimed to assess whether changes in FM over time affected BMD in the general population. MATERIAL AND METHODS: Data was collected from patients who underwent dual-energy X-ray absorptiometry (DEXA) assessment between 2004 and 2011. Patients were included if they had multiple scans, including FM measurements. Our scanners limited these to scans of the lumbar spine. Linear regression analysis was performed to identify the relationship between changes in FM and BMD. Backwards stepwise linear regression analysis was performed to identify confounding factors, including sex, risk factors, previous fractures, and baseline BMI. RESULTS: In this study, 23,239 patients were included, of which 702 met the inclusion criteria. There were 609 (86%) females and 93 (13%) males with a mean age of 64.5 (SD 11.2) years at first scan. We identified a strong positive correlation between increasing FM and BMD between scans (coefficient 28.4; $p<0.01$; 95% CI, 26.6-30.1). Previous pelvic and femur fractures and a history of inflammatory diseases were also associated with increasing FM ($p<0.05$). This relationship was true regardless of patients BMI at their first scan. CONCLUSION: These findings suggest that patients at high risk of fragility fractures should be encouraged to increase their FM as long as they are at a low risk for disease states related to high FM.

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Effect of Ovarian Hormone Therapy on Cognition in the Aged Female Rhesus Macaque.

Kohama SG, Renner L, Landauer N, Weiss AR, Urbanski HF, Park B, Voytko ML, Neuringer M.

Studies of the effect of hormone therapy on cognitive function in menopausal women have been equivocal, in part due to differences in the type and timing of hormone treatment. Here we cognitively tested aged female rhesus macaques on (1) the delayed response task of spatial working memory, (2) a visuospatial attention task that measured spatially and temporally cued reaction times, and (3) a simple reaction time task as a control for motor speed. After task acquisition, animals were ovariectomized (OVX). Their performance was compared with intact controls for 2 months, at which time no group differences were found. The OVX animals were then assigned to treatment with either a subcutaneous sham implant (OVX), 17-β estradiol (E) implant (OVX+E) or E implant plus cyclic oral progesterone (OVX+EP). All groups were then tested repeatedly over 12 months. The OVX+E animals performed significantly better on the delayed response task than all of the other groups for much of the 12 month testing period. The OVX+EP animals also showed improved performance in the delayed response task, but only at 30 s delays and with performance levels below that of OVX+E animals. The OVX+E animals also performed significantly better in the visuospatial attention task, particularly in the most challenging invalid cue condition; this difference also was maintained across the 12 month testing period. Simple reaction time was not affected by hormonal manipulation. These data demonstrate that chronic, continuous administration of E can exert multiple beneficial cognitive effects in aged, OVX rhesus macaque females. Thus, in this monkey model, chronic E administered soon after the loss of ovarian hormones had long-term benefits for cognitive function.

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Bisphosphonates for steroid-induced osteoporosis.

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BACKGROUND: This is an update of a Cochrane Review first published in 1999. Corticosteroids are widely used in inflammatory conditions as an immunosuppressive agent. Bone loss is a serious side effect of this therapy. Several studies have examined the use of bisphosphonates in the prevention and treatment of glucocorticosteroid-induced osteoporosis (GIOP) and have reported varying magnitudes of effect. OBJECTIVES: To assess the benefits and harms of bisphosphonates for the prevention and treatment of GIOP in adults. SELECTION CRITERIA: We included randomised controlled trials (RCTs) satisfying the following criteria: 1) prevention or treatment of GIOP; 2) adults taking a mean steroid dose of 5.0 mg/day or more; 3) active treatment including bisphosphonates of any type alone or in combination with calcium or vitamin D; 4) comparator treatment including a control of calcium or vitamin D, or both, alone or with placebo; and 4) reporting relevant outcomes. We excluded trials that included people with transplant-associated steroid use. MAIN RESULTS: We included a total of 27 RCTs with 3075 participants in the review. Pooled analysis for incident vertebral fractures included 12 trials (1343 participants) with high-certainty evidence and low risk of bias. In this analysis 46/597 (or 77 per 1000) people experienced new vertebral fractures in the control group compared with 31/746 (or 44 per 1000; range 27 to 70) in the bisphosphonate group; relative improvement of 43% (9% to 65% better) with bisphosphonates; absolute increased benefit of 2% fewer people sustaining fractures with bisphosphonates (5% fewer to 1% more); number needed to treat for an

additional beneficial outcome (NNTB) was 31 (20 to 145) meaning that approximately 31 people would need to be treated with bisphosphonates to prevent new vertebral fractures in one person.Pooled analysis for incident nonvertebral fractures included nine trials with 1245 participants with low-certainty evidence (downgraded for imprecision and serious risk of bias as a patient-reported outcome). In this analysis 30/546 (or 55 per 1000) people experienced new nonvertebral fracture in the control group compared with 29/699 (or 42 per 1000; range 25 to 69) in the bisphosphonate group; relative improvement of 21% with bisphosphonates (33% worse to 53% better); absolute increased benefit of 1% fewer people with fractures with bisphosphonates (4% fewer to 1% more).Pooled analysis on BMD change at the lumbar spine after 12 months included 23 trials with 2042 patients. Eighteen trials with 1665 participants were included in the pooled analysis on BMD at the femoral neck after 12 months. Evidence for both outcomes was moderate-certainty (downgraded for indirectness as a surrogate marker for osteoporosis) with low risk of bias. Overall, the bisphosphonate groups reported stabilisation or increase in BMD, while the control groups showed decreased BMD over the study period. At the lumbar spine, there was an absolute increase in BMD of 3.5% with bisphosphonates (2.90% to 4.10% higher) with a relative improvement of 1.10% with bisphosphonates (0.91% to 1.29%); NNTB 3 (2 to 3). At the femoral neck, the absolute difference in BMD was 2.06% higher in the bisphosphonate group compared to the control group (1.45% to 2.68% higher) with a relative improvement of 1.29% (0.91% to 1.69%); NNTB 5 (4 to 7).Pooled analysis on serious adverse events included 15 trials (1703 participants) with low-certainty evidence (downgraded for imprecision and risk of bias). In this analysis 131/811 (or 162 per 1000) people experienced serious adverse events in the control group compared to 136/892 (or 147 per 1000; range 120 to 181) in the bisphosphonate group; absolute increased harm of 0% more serious adverse events (2% fewer to 2% more); a relative per cent change with 9% improvement (12% worse to 26% better).Pooled analysis for withdrawals due to adverse events included 15 trials (1790 patients) with low-certainty evidence (downgraded for imprecision and risk of bias). In this analysis 63/866 (or 73 per 1000) people withdrew in the control group compared to 76/924 (or 77 per 1000; range 56 to 107) in the bisphosphonate group; an absolute increased harm of 1% more withdrawals with bisphosphonates (95% CI 1% fewer to 3% more); a relative per cent change 6% worse (95% CI 47% worse to 23% better).Quality of life was not assessed in any of the trials. AUTHORS' CONCLUSIONS: There was high-certainty evidence that bisphosphonates are beneficial in reducing the risk of vertebral fractures with data extending to 24 months of use. There was low-certainty evidence that bisphosphonates may make little or no difference in preventing nonvertebral fractures. There was moderate-certainty evidence that bisphosphonates are beneficial in preventing and treating corticosteroid-induced bone loss at both the lumbar spine and femoral neck. Regarding harm, there was low-certainty evidence that bisphosphonates may make little or no difference in the occurrence of serious adverse events or withdrawals due to adverse events. We are cautious in interpreting these data as markers for harm and tolerability due to the potential for bias.Overall, our review supports the use of bisphosphonates to reduce the risk of vertebral fractures and the prevention and treatment of steroid-induced bone loss.

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Accelerated Accumulation of Multimorbidity After Bilateral Oophorectomy: A Population-Based Cohort Study.

Rocca WA, Gazzuola-Rocca L, Smith CY, Grossardt BR, Faubion SS, Shuster LT, Kirkland JL, Stewart EA, et al.

OBJECTIVE:To study the association between bilateral oophorectomy and the rate of accumulation of multimorbidity.

PATIENTS AND METHODS: In this historical cohort study, the Rochester Epidemiology Project records-linkage system was used to identify all premenopausal women who underwent bilateral oophorectomy before age 50 years between January 1, 1988, and December 31, 2007, in Olmsted County, Minnesota. Each woman was randomly matched to a referent woman born in the same year (±1 year) who had not undergone bilateral oophorectomy. We studied the rate of accumulation of 18 common chronic conditions over a median of approximately 14 years of follow-up. RESULTS: Although women who underwent bilateral oophorectomy already had a higher multimorbidity burden at the time of oophorectomy, they also experienced an increased risk of subsequent multimorbidity. After adjustments for 18 chronic conditions present at baseline, race/ethnicity, education, body mass index, smoking, age at baseline, and calendar year at baseline, women who underwent oophorectomy before age 46 years experienced an increased risk of depression, hyperlipidemia, cardiac arrhythmias, coronary artery disease, arthritis, asthma, chronic obstructive pulmonary disease, and osteoporosis. In addition, they experienced an accelerated rate of accumulation of the 18 chronic conditions considered together (hazard ratio, 1.22; 95% CI, 1.14-1.31; P<.001). Several of these associations were reduced in women who received estrogen therapy. CONCLUSION: Bilateral oophorectomy is

associated with a higher risk of multimorbidity, even after adjustment for conditions present at baseline and for several possible confounders. However, several of these associations were reduced in women who received estrogen therapy.