Selección de Resúmenes de Menopausia

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A review of the role for pelvic floor physiotherapy in postmenopausal women with urinary incontinence

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Urinary incontinence is a prevalent condition affecting women. Pelvic floor physiotherapy is a specialized field of physiotherapy dedicated to assessing and treating pelvic floor muscles. This therapy has demonstrated benefits in addressing stress urinary incontinence in premenopausal women, with numerous studies supporting its efficacy in this population. However, pelvic floor physiotherapy in the treatment of postmenopausal women is less well-established, and furthermore, the types of urinary incontinence in postmenopausal women are much broader. We provide a comprehensive review of recent literature investigating the effectiveness of pelvic floor physiotherapy therapy for various conditions in postmenopausal women, including urinary incontinence, urgency urinary incontinence, pelvic organ prolapse, genitourinary syndrome of menopause, sexual dysfunction, and urinary incontinence in the context of obesity, frailty, mobility, and dementia. After evaluating the current literature, it is evident that there is insufficient data to definitively endorse or dismiss the utilization of Pelvic floor physiotherapy for treating urinary incontinence in postmenopausal women. Nevertheless, considering the low associated risks of pelvic floor physiotherapy, we advocate for the initiation of comprehensive, large-scale randomized studies aimed at evaluating its effectiveness in addressing urinary incontinence in postmenopausal women with special attention to vulnerable subgroups, including individuals who are obese, frail or experiencing cognitive impairment.

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The Association of Vitamin D with Uterine Fibroids in Premenopausal Patients: a Systematic Review and Meta-Analysis

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Objective: This study aims to consolidate existing literature regarding the association between vitamin D and uterine fibroid presence and growth. Study selection: From 9931 studies screened based on title and abstract, those evaluating serum vitamin D levels or vitamin D treatment effects, using ultrasonography for diagnosis, and involving at least 25 pre-menopausal participants were included. Methodological quality was assessed through the Newcastle-Ottawa Scale and the Risk of Bias-2 tools. Evidence quality was evaluated using Grading of Recommendations Assessment, Development, and Evaluation. Data from three randomized controlled trials (n = 328) and 23 observational studies (n = 5650) were meta-analyzed via random effects modeling. Patients receiving oral vitamin D supplementation had a significantly different change in fibroid size (SMD -5.7%, CI -10.63 to -0.76, P = 0.02, I2 = 99%), as measured by percentage change in diameter or volume, compared to controls, over the span of 2-6 months. Those receiving supplementation had vitamin D insufficiency; regimens varied between 50 000 IU weekly for 12 weeks, 50 000 IU weekly for 8 weeks, and 50 000 IU biweekly for 10 weeks. Patients with fibroids exhibited lower serum vitamin D concentrations (MD -5.50 ng/mL, CI 6.99 to -4.01, P < 0.001, I2 = 87%) and higher odds of vitamin D deficiency (OR 3.71, CI 1.90-7.24, P < 0.001, I2 = 80%). Conclusion: This review underscores the potential of vitamin D in mitigating fibroid development and growth. While promising, further research is warranted to optimize dosage and treatment duration, potentially offering a non-invasive solution for at-risk patients. Continued exploration of vitamin D's role in fibroid treatment is encouraged.

Scand J Gastroenterol. 2024 Aug 10:1-6. doi: 10.1080/00365521.2024.2390016. Online ahead of print.

Clinical utility of the fracture risk assessment tool (FRAX) in biopsy-confirmed coeliac disease

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Background: People with coeliac disease (CD) are at increased risk of osteoporosis and fractures. Currently, baseline dual-energy X-ray absorptiometry (DXA) is recommended for all patients with newly diagnosed CD. We aimed to determine the prevalence of osteoporosis and the clinical utility of the Fracture Risk Assessment Tool (FRAX) in predicting major osteoporotic fractures (MOF) in patients with biopsy-proven CD. Methods: We retrospectively collected data for consecutive adult patients with biopsy-proven CD between 20 01 and 2015 who underwent DXA scanning within 1 year of diagnosis and were followed up for a minimum of 7 years. Fracture risk was assessed using FRAX scores, and the incidence of major osteoporotic fractures during the follow-up period was analysed. Results: A total of 593 patients (median age 45.0 years, 68.5% female) were included. The prevalence of osteopenia and osteoporosis were 32.3% and 14.5%, respectively. Increasing age (OR 1.06, $p < .0001$), decreasing BMI (OR 0.90, $p = .003$), and higher baseline immunoglobulin A-tissue tissue transglutaminase titre (OR 1.04, $p = .03$) were significantly associated with increased risk of osteoporosis. The sensitivity, specificity, positive and negative predictive values of the FRAX tool to predict MOF were 21.2%, 91.3%, 16.3%, 93.5%, respectively. A higher risk of fractures was associated with ongoing gluten exposure (OR 1.86, $p = .02$), previous fractures (OR 2.69, $p = .005$), and older age (OR 1.03, $p < .0001$). Conclusion: Osteoporosis is a common finding in patients with CD. The FRAX tool showed high specificity in predicting osteoporotic fractures and could be used to aid with patient selection for DXA scanning in some cases.

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Exploring neuronal mechanisms of osteosarcopenia in older adults

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Until recently, research on the pathogenesis and treatment of osteoporosis and sarcopenia has primarily focused on local and systemic humoral mechanisms, often overlooking neuronal mechanisms. However, there is a growing body of literature on the neuronal regulation of bone and skeletal muscle structure and function, which may provide insights into the pathogenesis of osteosarcopenia. This review aims to integrate these neuronal regulatory mechanisms to form a comprehensive understanding and inspire future research that could uncover novel strategies for preventing and treating osteosarcopenia. Specifically, the review explores the functional adaptation of weight-bearing bone to mechanical loading throughout evolutionary development, from Wolff's law and Frost's mechanostat theory to the mosaic hypothesis, which emphasizes neuronal regulation. The recently introduced bone osteoregulation reflex points to the importance of the osteocytic mechanoreceptive network as a receptor in this neuronal regulation mechanism. Finally, the review focuses on the bone myoregulation reflex, which is known as a mechanism by which bone loading regulates muscle functions neuronally. Considering the ageing-related regressive changes in the nerve fibres that provide both structural and functional regulation in bone and skeletal muscle tissue and the bone and muscle tissues they innervate, it is suggested that neuronal mechanisms might play a central role in explaining osteosarcopenia in older adults.

Neuropsychol Dev Cogn B Aging Neuropsychol Cogn. 2024 Aug 8:1-19. doi: 10.1080/13825585.2024.2386314.

Critical menarche age for late-life dementia and the role of education and socioeconomic status

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Estrogen exposure during menstrual years has been associated with late-life neuroprotection. We explored the presence of an age-sensitive menarche window for cognition in old age and the impact of socioeconomic status and education. We compared neuropsychological performance of 1082 older women [MeanAGE = 72.69 (5.48)] with menarche in childhood, early-, mid-, and late-adolescence and dementia prevalence, severity, and type, including the effects of education and socioeconomic status. Adjusting for covariates, menarche at 11-14 years of age was associated with better memory, executive and global cognitive functioning in old age, and stronger positive effects of education and socioeconomic status on cognition than those with menarche at 15-17 years. We found a critical age window for the neuroprotective effects of estrogens during early adolescence, putting women with later menarche at higher risk for cognitive decline. Effects of socioeconomic status and education in adulthood should be a focus of future research.

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Neuroendocrine mechanisms of mood disorders during menopause transition: A narrative review and future perspectives

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The menopause transition is an important period in a woman's life, during which she is at an increased risk of mood disorders. Estrogen and progesterone fluctuations during the menopausal transition and very low levels of estradiol after menopause have a profound effect on the central nervous system (CNS), causing an imbalance between excitatory and inhibitory inputs. Changes in neurotransmission and neuronal interactions that occur with estradiol withdrawal disrupt the normal neurological balance and may be associated with menopausal symptoms. Hot flushes, depressed mood and anxiety are all symptoms of menopause that are a consequence of the complex changes that occur in the CNS, involving many signaling pathways and neurotransmitters (i.e. γ-aminobutyric acid, serotonin, dopamine), neurosteroids (i.e. allopregnanolone), and neuropeptides (i.e. kisspeptin, neurokinin B). All these pathways are closely linked, and the complex interactions that exist are not yet fully understood. This review summarizes the neuroendocrine changes in the CNS during the menopausal transition, with particular emphasis on those that underlie mood changes.