The association of leukocyte telomere length with exceptional longevity among older women
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The association of leukocyte telomere length (LTL) with survival to late life with intact mobility has not been adequately studied. This prospective cohort study consisted of 1451 postmenopausal women from a Women's Health Initiative ancillary study, who were eligible, because of birth year, to survive to age 90 as of March 6, 2021. LTL was measured by Southern blot at baseline (1993-1998). Associations between LTL and survival to age 90 were evaluated using logistic regression models adjusted for socio-demographic characteristics, health factors, and lifestyle factors. Multinominal logistic regression was utilized to examine associations of LTL with survival to age 90 with or without intact mobility. Mediation analysis examined the extent to which incident coronary heart disease and stroke-mediated the association between LTL and longevity. Overall, 76.7% of women were White, and 23.3% were Black; average age at baseline was 70.4±3.5 years. Relative to death before age 90, the odds of survival to age 90 were 60% higher (OR, 1.60; 95% CI, 1.28-2.01), the odds of survival to age 90 with mobility limitation were 72% higher (OR, 1.72; 95% CI, 1.33-2.21), and the odds of survival to age 90 with intact mobility were 44% higher (OR, 1.44; 95% CI, 1.06-1.95) for every one kilobase longer LTL. Absence of CHD, stroke, or CHD/stroke mediated the association of LTL with survival to age 90 by 11.1%, 37.4%, and 31.3%, respectively; however, these findings were not significant. Longer LTL was associated with higher odds of survival to age 90 among older women.

Primary Hyperparathyroidism in Older Adults: A Narrative Review of the Most Recent Literature on Epidemiology, Diagnosis and Management
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Background: Primary hyperparathyroidism (PHPT) is a common endocrine disorder among older adults. The aim of this review is to shed light on PHPT, particularly in this age group, in terms of prevalence, clinical manifestations, medical and surgical management, and post-operative complications. Methods: Eligible studies were those considering PHPT exclusively in the older population (main databases: PubMed, Medline, Google Scholar and the University Online database). Articles published in the last 10 years (2013-2023) were considered. Eligibility criteria followed the SPIDER (sample, phenomenon of interest, design, evaluation, research type) tool. The methodological quality of the studies was assessed using the Joanna Briggs Institute critical appraisal tool. A total of 29 studies (mainly observational) matched the inclusion criteria. Results: The prevalence of PHPT is approximately 1 per 100 in the elderly, and it is more common in females. The clinical presentation varies by age and can include osteoporosis, fractures, and neuropsychiatric symptoms. Conservative management can be an option whenever surgery is not indicated or feasible. However, parathyroidectomy (PTX) remains a safe and effective modality in aging populations with improvement to symptoms, bone mineral density, fracture risk, frailty, quality of life, and metabolic derangements. Complication rates are similar in elderly people compared to younger ones, except for mildly longer length of hospital stay and reoperation for those with higher frailty. Conclusion: PHPT is a common yet overlooked and underdiagnosed condition among the older population. The safety and efficacy of PTX in the older population on different levels is now well demonstrated in the literature.

Brain volumetric changes in menopausal women and its association with cognitive function: a structured review
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The menopausal transition has been proposed to put women at risk for undesirable neurological symptoms, including cognitive decline. Previous studies suggest that alterations in the hormonal milieu modulate brain structures associated with cognitive function. This structured review provides an overview of the relevant studies that have utilized MRI to report volumetric differences in the brain following menopause, and its correlations with the evaluated cognitive functions. We performed an electronic literature search using Medline (Ovid) and Scopus to identify studies that assessed the influence of menopause on brain structure with MRI. Fourteen studies met the inclusion criteria. Brain volumetric differences have been reported most frequently in the frontal and temporal cortices as well as the hippocampus. These regions are important for higher cognitive tasks and memory. Additionally, the deficit in verbal and visuospatial memory in postmenopausal women has been associated with smaller regional brain volumes. Nevertheless, the limited number of eligible studies and cross-sectional study designs warrant further research to draw more robust conclusions.


Mammographic Breast Density and Risk of Ovarian Cancer in Korean Women
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Background: This study aimed to investigate the potential association between mammographic breast density and ovarian cancer risk. Methods: This retrospective cohort study included women ≥ 40 years of age who underwent a mammography screening from 2009 to 2014. Breast density was assessed using the Breast Imaging-Reporting and Data System (BI-RADS). The primary outcome was ovarian cancer development, and the cases were recorded until 2020. Cox proportional hazards regression was used to assess the association between breast density and ovarian cancer development. Subgroup analyses stratified by age, menopausal status, and BMI were conducted. Results: Of the 8,556,914 women included in this study, 9,246 ovarian cancer events were recorded during a median follow-up period of 10 years (IQR 8.1-11.0 years). Compared with women with almost entirely fat density, those with scattered fibroglandular density, heterogeneous density, and extreme density had an increased risk of ovarian cancer with adjusted hazard ratios of 1.08 (95% confidence interval [CI] 1.02-1.15), 1.16 (95% CI 1.09-1.24), and 1.24 (95% CI 1.15-1.34), respectively. The strongest association was observed in the ≥ 60 years age group; subgroup analysis indicated a significant increase in association between the higher-density category and ovarian cancer risk, regardless of BMI or menopausal status. Conclusion: Higher levels of breast density are associated with an increased risk of ovarian cancer. Impact: Breast density may have a relationship with ovarian cancer risk and could be used to assess future risk.


Paradoxical Effects of Prolonged Insufficient Sleep on Lipid Profile: A Pooled Analysis of 2 Randomized Trials
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Background: Insufficient sleep is associated with increased cardiovascular disease risk, but causality is unclear. We investigated the impact of prolonged mild sleep restriction (SR) on lipid and inflammatory profiles. Methods and Results: Seventy-eight participants (56 women [12 postmenopausal]; age, 34.3±12.5 years; body mass index, 25.8±3.5 kg/m2) with habitual sleep duration 7 to 9 h/night (adequate sleep [AS]) underwent two 6-week conditions in a randomized crossover design: AS versus SR (AS-1.5 h/night). Total cholesterol, low-density lipoprotein cholesterol (LDL-C), high-density lipoprotein cholesterol, triglycerides, and inflammatory markers (CRP [C-reactive protein], interleukin 6, and tumor necrosis factor-α) were assessed. Linear models tested effects of SR on outcomes in the full sample and by sex+menopausal status (premenopausal versus postmenopausal women+men). In the full sample, SR increased high-density lipoprotein cholesterol compared with AS (β=1.2±0.5 mg/dL; P=0.03). Sex+menopausal status influenced the effects of SR on change in total cholesterol (P-interaction=0.04), LDL-C (P-interaction=0.03), and interleukin 6 (P-interaction=0.07). Total cholesterol and LDL-C decreased in SR versus AS in premenopausal women (total cholesterol: β=-4.2±1.9 mg/dL; P=0.03; LDL-C: β=-6.3±2.0 mg/dL; P=0.002). Given paradoxical effects of SR on cholesterol concentrations, we explored associations between changes in inflammation and end point lipids under each condition. Increases in interleukin 6 and tumor necrosis factor-α during SR tended to relate to lower LDL-C in premenopausal women (interleukin 6: β=-5.3±2.6 mg/dL; P=0.051; tumor necrosis factor-α: β=-32.8±14.2 mg/dL; P=0.027). Conclusions: Among healthy adults, prolonged insufficient sleep does not increase
atherogenic lipids. However, increased inflammation in SR tends to predict lower LDL-C in premenopausal women, resembling the "lipid paradox" in which low cholesterol associates with increased cardiovascular disease risk in proinflammatory conditions.