

Study of the relationship between bone mineral density (BMD) and cognitive decline in older women

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They aimed to assess the relationship between low bone mineral density "BMD" and cognitive function in older postmenopausal women. The study was carried on 105 postmenopausal women free from any medical disease and not on any medication that could affect the BMD or cognitive functions. Assessment of the investigated sample was done using Geriatric depression scale (GDS), activities of daily living (ADL), (MMSE) and measurement of BMD of lumbar spine, left neck femur, and forearm (T-score) using DEXA. It was found that only the marital status, age at menopause, number of pregnancies and BMD; have an independent effect on cognitive function (MMSE score). That result confirmed his aimed hypothesis that there is a relationship between BMD and cognitive function in postmenopausal women. That result that BMD (which was taken as a surrogate marker of cumulative estrogen exposure) has an independent effect on cognitive function (MMSE score) supports the role of estrogen deficiency in cognitive decline in older post-menopausal women.