



Tea consumption and the prevalence of osteoporosis after menopause

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Abstract

Background: Osteoporosis is a multifactorial skeletal disease dependent to anthropometric characteristics and various lifestyle parameters such as physical activity, smoking, excessive alcohol and caffeine intake. It is more common in elders, especially in postmenopausal women. The studies on caffeine intake effects on bone mineral density (BMD) were carried out in communities in which most caffeine intake was in the form of coffee; therefore, correlation mechanism between prevalence of postmenopausal osteoporosis and habitual tea intake (HTI) is an important instance.

Objective: To assess the effects of habitual tea intake on the prevalence of postmenopausal osteoporosis. In addition, consider the effects of some other parameters, such as age and anthropometric characteristics.

Methods: In a cross-sectional study based on BMD measurement using dual-energy X-Ray Absorptiometry (DEXA), 176 postmenopausal women who were referred to our hospital in Tehran were selected and recruited, randomly. Anthropometric parameter such as weight and height were recorded to calculate BMI while the habitual tea intake per day was estimated using a health and lifestyle questionnaire.



Results: Habitual tea intake is resulted in significant effect on BMD ($P=0.001$) and positively correlated with, meaning subjects who used daily tea intake more than 6 cups, have higher BMD and subsequently, lower tend to osteoporosis.

Conclusion: Our findings indicated that older women with low BMI and low habitual tea intake were at higher risk of low bone mass. Body weight, BMI and aging and habitual tea intake are important predictors of BMD, Therefore, it is recommended to assess other risk factors with a larger number of patients.

Keywords: Bone mineral density (BMD), Habitual tea intake (HTI), Osteoporosis, Postmenopausal