

Bone Mineral Density results; Estrogen, Vitamin D and other factors among woman in Nablus city– Palestine

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Abstract :

Osteoporosis is an important health problem which affected the density and quality of bone, characterized that the bones become fragile, brittle and more susceptible to get fracture, also osteoporosis called as a "silent disease" without symptoms so people they don't know that they have disease.

In addition, it was found that the prognosis of osteoporosis will increased in the Palestine, especially among women .So,the aim of the studywas to determine the relationship between estrogen level, vitamin D and BMD and to find out other factors affecting BMD results in Nablus city.

A descriptive quantitative design was used to achieve the aim of the study utilizing convenience quota sampling method to select 300 women for those who attend to the Little Hand Society in Nablus city.

A self-administered questionnaire was used tocollect dataand to assess other factors, bone mineral density was evaluated using DXA devices at both side lumber and femoral, and estrogen level for 300 women and vitamin D level for 150 women was tested through blood sampling.

The results showed that the BMD results at femoral and lumber site were respectively as following: normal (58.7%) (52%), osteopenia (36%) (35.7%) and osteoporosis (5.3%) (12.3), the study also showed that there was a positive relationship between estrogen level and BMD results .The risk factors that affecting the BMD results; age ,menopause, BMI, milk consumption, soft drinks consumption, duration of exercise, status of menses and number of breast fed children.

Conclusion,the osteopenia percentage was prominent and high among participants in general, the highest percent of it was in women at age (>55) year. The normal Estrogen serum level according to status of period were as following: (76%) of women who have regular period, their results were (15-350) ,also (72%) of women who have irregular period their results were (15-350) , in addition (35%) of menopause women , their results were (less than 10). Moreover the highest age group has deficiency in Vitamin D is (45-44).Recommendation:further attention for women who developed osteopenia to prevent developing osteoporosis and any consequences

Key words:osteoporosis, vitamin D, estrogen level and BMD results