Comparing effect of Osteofos® versus Alenate® on postmenopausal bone mineral density; a randomized double blind controlled equivalence trial

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Background and Aims: This study aimed to compare the efficacy of the less pricey Iranian version of the medication (Alenate) with the imported version (Osteofos) in postmenopausal women of Gorgan city during 2007-2009.

Methods: 147 postmenopausal women diagnosed with osteoporosis were enrolled in this double blind study. The demographic data, past medical history, drug history along with the BMD values at the lumbar and femoral regions were recorded at the baseline. Patients were divided into two groups by block balanced randomization method to receive weekly Alenate 70 mg and Osteofos 70mg. They were then followed by a rheumatologist every three months for 18 months. BMD values were re-measured after 18 months with the same device.

Results: The mean age of the patients was 60.2 ± 6.8 years for the first group and 58.6 ± 6.3 for the second group. There was no significant difference between two groups in education level, job, daily dairy consumption, weekly engagement in physical activity, BMI, postmenopausal years, history of early menopause, past medical history, drug history, and BMD values at lumbar and femoral regions at baseline. There was no significant difference between the increase noted in BMD values of the two groups following the consumption of the drugs (P-value>0.05).

Conclusions: The changes in BMD values observed in this trial showed that Alenate can be a less pricey alternative for osteofos in treating osteoporosis.

Keywords: Osteoporosis; BMD; Alenate; Osteofos