A comparative study of bone mass densitometry efficacy at two sites versus three sites in suspected patients to osteoporosis

Abstract

Introduction: Osteoporosis is the most common metabolic bone disease characterized by decreased bone mass and decreased bone connective tissues is determined. Osteoporosis is a common disease that is debilitating complications imposes a huge economic burden on society. In this study, all patients have been densitometry Three-focus and patients have not been diagnosed by dual-focus method were detected by researcher, and error dual-focus of detection were been determined.

Materials and Methods: 1387 patients visiting the clinic and rheumatology clinic were randomly selected. After completing the questionnaire, patients are referred for radiology lab densitometry. BMD at the World Health Organization protocol by DEXA (Dual Energy X-Ray Absorptiometry) in the bones of femoral neck and lumbar vertebrae and distal radius is determined. In this study Densitometry based on age rather than the focus being conducted at three centers. In other words L1 to L4 lumbar spine and a third distal radius as a third focus will be examined.

Results: In this study, 1387 patients with suspected osteoporosis densitometry were evaluated, 469 patients older than 60 years and 916 patients below 60 years. 28/38% were male and the other female patients was 61.71%. The mean age of patients was 22/03 ± 48.91 which was the most common age range 60-40 years were 527 in this period. 465 people in the age range 60-80 years. In patients below 60 years according to the study, 32% normally, 41% osteopenia, osteoporosis had 27% . In people over 60 years according to the current study, 24% normally, 41% osteopenia, osteoporosis had 35% .According to the study, 90 patients under 60 years and 54 patients in group above 60 years with two-focus group were reported normal incorrectly in other words they miss.

Conclusion: There is a significant differences between the groups , below 60 years and above 60 years, in terms of distinguishing between Densitometry 3 focus and 2 focus

Keywords: bone densitometry, three-focus, dual-focus, Ardabil