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Retrospective Analysis of Osteoporotic Vertebral Fractures

Osteoporotik Vertebra Kırıklarının Retrospektif Analizi

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Dear Editor,

I have read with great interest the research article by Akar, titled 'Retrospective Analysis of Osteoporotic Vertebral Fractures' published in the third issue of Ahi Evran Medical Journal in 2023.[1] I would like to express my appreciation to the author and the editorial board for this insightful and highly informative article. In this letter, I intend to address particular aspects that I believe will contribute to a more comprehensive discussion of the article.

Osteoporotic fractures represent preventable conditions that pose significant challenges, particularly in the geriatric population, leading to considerable morbidity, mortality, and healthcare expenses.[2] As underscored by Akar, early detection of osteoporosis and screening of high-risk populations are crucial interventions. Akar's retrospective study, which elucidates the characteristics of patients with osteoporotic vertebral fractures, provides valuable insights into the risk factors for fractures and the demographic profiles of affected individuals. Data derived from this and similar studies serve as fundamental principles in the prevention of osteoporotic vertebral fractures. Notably, the study revealed that none of the 65 patients had undergone prior dual-energy x-ray absorptiometry (DEXA) screening, highligting a notable gap in osteoporosis screening practices within our community, despite established guidelines.

The study reported that 73.8% of the patients diagnosed with osteoporosis via DEXA. However, I wish to address a concern regarding the method of osteoporosis diagnosis in patients, where the average DEXA T-scores were utilized without specifying the anatomical region. While it was assumed that the reported DEXA T-score average pertained to the lumbar region, osteoporosis diagnosis can also be based on the T-score of the femoral neck.[2] This situation suggests that some patients diagnosed with osteopenia in this study may have had a femoral neck T-score below -2.5 standard deviations if imaging had been conducted, indicating a potential diagnosis of osteoporosis. Furthermore, it is noteworthy that osteoporosis diagnosis using the DEXA T-score is commonly applied to men over 50 years of age and postmenopausal women. However, the study included individuals aged 50 and above without considering the menopausal status of the women.[3] Additionally, it's essential to note that osteoporosis diagnosis can be established without DEXA in cases of osteoporotic vertebral fractures resulting from trauma-free or low-energy trauma.[3,4] Given that 38.5% of patients experienced fractures without trauma in the study, considering them osteoporotic regardless of DEXA results would further elevate the prevalence of osteoporosis in the study population. This situation highlights the severity and high prevalence of osteoporosis within our community.

In conclusion, the effective management of osteoporotic vertebral fractures, a significant public health concern,

depends on widespread screening, early diagnosis, and prompt treatment of osteoporosis. I express my gratitude to the author for their valuable contribution to this vital topic through this study.

Conflict of Interest

The authors declare that there is not any conflict of interest regarding the publication of this manuscript.

Authors' Contributions

Concept/Design: MCŞ. Data Collection and/or Processing: MCŞ. Data analysis and interpretation: MCŞ. Literature Search: MCŞ. Drafting manuscript: MCŞ. Critical revision of manuscript: MCŞ. Supervisor: MCŞ

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