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Risk factors associated with osteoporosis in patients attending rheumatology clinics, in a tertiary care hospital

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Introduction

Osteoporosis is a common and potentially disabling disorder of bone as it leads to bone fragility and fractures. About 7 million osteoporosis related fractures occur worldwide every year (1). Data from 9 industrialized countries shows prevalence of Osteoporosis at 1 to 8% for men and 9 to 38% for women above the age of 50 years (2). In another study by Lee et al 283 out of 320 patients attending rheumatology clinic had osteoporosis (88.4%) (3). Factors like age, female gender, menopause, smoking, medication use and co-morbid conditions including inflammatory, malignant and metabolic conditions like diabetes have been linked to increased risk of osteoporosis (4–8). In a study by malgo et al, assessing causes of osteoporosis it was found, smoking (16%), excessive alcohol use (14%), corticosteroid use (13%), rheumatoid arthritis (2%) and other secondary causes (20%) (9). Local studies on these factors in patients, in particular for patients with rheumatological diseases is lacking. This study is aimed at determining the risk factors associated with osteoporosis and to identify potential factors that contribute to development of osteoporosis.

Method

In this cross-sectional observational study conducted in a rheumatology department in a tertiary care hospital we observed osteoporosis patients presenting to us and analyzed the associated risk factors. Data

Result

This is an ongoing study and data of 223 patients has been analyzed and presented. A major portion of patients, 53 (23.7%) had no associated risk factors, or history of fractures and had developed osteoporosis. Mean age of developing osteoporosis in them was 61.55, while mean duration since onset of menopause was 15.06 years. Patients with carcinoma of breast who were screened early for being started on aromatase inhibitors had osteoporosis.

Conclusion

Based on above results we can vouch for early screening for osteoporosis in post-menopausal women in our community. In the end much emphasis and research needs to be put on considering carcinoma of breast as an independent risk factor for development of osteoporosis.

References

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T Scores	Mean ± SD
Spine	- 2.57 ± 0.97
Hip	-1.99 ± 1.07
Radius	-2.74 ± 1.23