

Interest Of Vertebral Fracture Assessment (Vfa) In Women Treated For Breast Cancer With Aromatase Inhibitors

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Introduction

Aromatase inhibitors (AIs) significantly reduce serum estrogen levels. Women with breast cancer treated with AIs may be at increased risk of fractures due to the loss of estrogen's protective effect on bone mineral density (BMD).

Objective

This study aims to evaluate the prevalence of vertebral fractures (VFs) detected by vertebral fracture assessment (VFA) in women undergoing AI therapy for breast cancer.

Methods

A retrospective comparative study included two groups: one of women with breast cancer receiving AI therapy and one of AI-naïve women without breast cancer. Both groups were indicated for vertebral fracture assessment using X-ray absorptiometry.

Exclusion criteria: Presence of other osteoporosis risk factors besides AI therapy.

Results

A total of 118 postmenopausal women were included: 59 women (mean age 64.3 years) on AI therapy, and 59 women (mean age 62.4 years) naïve to AI treatment. In terms of BMD, 38% of AI-treated women had significant osteoporosis, and 43% had osteopenia at least at one site, compared to 34% and 46%, respectively, in the AI-naïve group. The prevalence of VFs identified by VFA was 53% in the AI group and 48% in the AI-naïve group. In the AI group, 45% of fractures were grade 2 or 3, associated with lumbar spine T-scores between -2.4 and -2.9 in 5.7%, below -3.2 in 26.6%, and osteopenia in 15.9%.

Conclusion

AI therapy is linked to a high prevalence of vertebral fractures on VFA, which seems independent of BMD values during treatment. Although VFA is not a standard indication for AI therapy, these findings suggest its consideration for all women undergoing AI treatment.