

# “I Feel Like I Am 100 Years Old!” Managing Arthralgias From Aromatase Inhibitors

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Aromatase inhibitors (AIs) are recommended for the treatment of estrogen-sensitive breast cancer in postmenopausal women and provide a superior risk reduction compared to five years of tamoxifen alone. Arthralgias, a common side effect of AIs, may adversely affect quality of life, treatment adherence, and persistence. Early discontinuation of AIs may result in an inadequate clinical response. Over-the-counter analgesics, exercise, and drug holidays are common strategies used to manage arthralgias, however few interventions are evidence-based. Patients experiencing arthralgias may experience distress and, therefore would benefit from ongoing nursing support. When caring for patients with arthralgias, nurses should assess for potential modifiable risk factors, recommend lifestyle changes and/or pharmacologic interventions, and offer ongoing education and follow-up.

J.P. was a 55-year-old postmenopausal woman diagnosed with stage I estrogen receptor-positive breast cancer. She was a single mother with two teenage children and worked full-time as a paralegal. Her lifestyle was mostly sedentary, and she found it difficult to “make time” for regular exercise. Following a left lumpectomy and sentinel node biopsy, J.P. received breast radiation. Her oncologist then prescribed adjuvant endocrine therapy with the aromatase inhibitor (AI) anastrozole for five years. Five months after starting therapy, J.P. arrived at the oncology clinic for a follow-up visit and told the nurse about the intolerable joint pain and stiffness she was experiencing.

## Nursing Assessment

The oncology nurse assessed the extent of J.P.'s pain and stiffness by asking her specific questions about its onset and timing, location, description, intensity, aggravating and relieving factors, and effect on mood and physical and social functioning. J.P. reported a moderate to severe degree of stiffness and aches in her hands, wrists, hips, and knees bilaterally, particularly when getting out of bed, a chair, or a car.

Her medications included anastrozole and hydrochlorothiazide plus a multivitamin daily. Acetaminophen did not relieve her joint pain. The nurse explored the cause of J.P.'s pain and the consequences of stopping anastrozole treatment.

The nurse reviewed J.P.'s medical history for any potential risk factors for developing arthralgias, such as those listed in Figure 1. J.P. went through natural menopause at age 50 and took hormone-replacement therapy for two years to manage hot flashes before stopping when she was diagnosed with breast cancer. Her bone density was normal prior to starting the AI, vitamin D was within normal limits, her body mass index was 28, and she had no prior history of arthritis.

J.P. reported that she felt like a “100-year-old woman” since starting the AI, and she was concerned the treatment was causing her body to “age faster than normal.” How-

ever, J.P. was fearful that the cancer would recur if she stopped the AI treatment.

## Etiology

Joint pain associated with AIs, also known as the arthralgia syndrome, is characterized by bilateral and symmetrical pain and stiffness in the joints of the hands, knees, lower back, shoulder, hips, and/or feet; can be associated with early-morning stiffness and difficulty sleeping; and typically arises within two months of starting therapy with an AI (Burstein, 2007). Although several potential etiologies have been hypothesized, estrogen depletion seems to play an important role in the development of musculoskeletal pain in patients taking an AI (Henry, Giles, & Stearns, 2008). Findings also suggest that some women may carry a genetic variant that increases their likelihood of

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