Auricular Point Acupressure to Manage Aromatase Inhibitor–Induced Arthralgia in Postmenopausal Breast Cancer Survivors: A Pilot Study

Chao Hsing Yeh, RN, PhD, Wei-Chun Lin, MD, MS, Lorna Kwai-Ping Suen, RN, MPH, PhD, Na-Jin Park, RN, PhD, Lisa J. Wood, RN, PhD, G.J. van Londen, MD, MS, and Dana Howard Bovbjerg, PhD

Purpose/Objectives: To assess the feasibility of auricular point acupressure to manage aromatase inhibitor–induced arthralgia.

Design: Wait list control design.

Setting: Outpatient clinics and oncology center.

Sample: 20 women with aromatase inhibitor–induced arthralgia.

Methods: After baseline data were collected, participants waited one month before they received acupressure once per week for four weeks at a convenient time. The baseline data served as the control comparison. Self-reported measures and blood samples were obtained at baseline, at preintervention, weekly during the intervention, and at postintervention.

Main Research Variables: The primary outcomes included pain intensity, pain interference, stiffness, and physical function. Inflammatory cytokines and chemokines were tested.

Findings: After the four-week intervention, participants reported decreases in worst pain and pain interference, and improvements in physical function, cancer-related symptom severity, and interference. The proinflammatory cytokines and chemokines displayed a trend of a mean percentage reduction. The anti-inflammatory cytokine interleukin-13 increased from pre- to postintervention.

Conclusions: Auricular point acupressure is feasible and may be effective in managing arthralgia in breast cancer survivors.

Implications for Nursing: Nurses can administer acupressure in clinical settings, which could enhance the management of aromatase inhibitor–induced arthralgia and contribute to a shift from traditional disease-based biomedical models to a broader, integrative, medical paradigm for managing aromatase inhibitor–induced arthralgia.

Aromatase inhibitor (AI) therapy has become an important standard of care for postmenopausal breast cancer survivors (PBCS) (Early Breast Cancer Trialists’ Collaborative Group, 2015). Adherence to this adjuvant endocrine therapy is an essential part of the multimodality treatment regimen of hormone-responsive breast cancer (Burstein et al., 2014; Hershman et al., 2010, 2011); however, adherence is challenging for patients because AI therapy requires daily use of an oral medication that must be continued for five years or longer (Hershman et al., 2010, 2011; Murphy, Bartholomew, Carpenter, Bluetmann, & Vernon, 2012). AI-induced arthralgia (AlA), particularly its high pain intensity, is a major challenge for optimal adherence to AI therapy (Hershman et al., 2010, 2011; Hershman, Loprinzi, & Schneider, 2015) and contributes to a 20%–50% rate of premature discontinuation (Henry et al., 2008, 2012; Howell et al., 2005; Mao et al., 2009; Presant et al., 2007). No effective