

Journal Watch

Phase III evaluation of fluoxetine for treatment of hot flashes.

Loprinzi CL, Sloan JA, Perez EA, Quella SK, Stella PJ, Mailliard JA, Halyard MY, Pruthi S, Novotny PJ, Rummans TA. *Journal of Clinical Oncology* Vol 20 (6) 1578-1583

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Abstract:

Purpose: Hot flashes can be a prominent problem in women with a history of breast cancer. Given concerns regarding the use of hormonal therapies in such patients, other nonhormonal means for treating hot flashes are required. Based on anecdotal information regarding the efficacy of fluoxetine and other newer antidepressants for treating hot flashes, the present trial was developed.

Patients and Methods: This trial used a double-blinded, randomized, two-period (4 weeks per period), cross-over methodology to study the efficacy of fluoxetine (20 mg/d) for treating hot flashes in women with a history of breast cancer or a concern regarding the use of estrogen (because of breast cancer risk). Eligible patients had to have reported that they averaged at least 14 hot flashes per week; they could have received tamoxifen or raloxifene as long as they were on a stable dose. The major outcome measure was a bivariate construct representing hot flash frequency and hot flash score, analyzed by a classic sums and differences cross-over analysis.

Results: Eighty-one randomized women began protocol therapy. By the end of the first treatment period, hot flash scores (frequency x average severity) decreased 50% in the fluoxetine arm versus 36% in the placebo arm. Cross-over analysis demonstrated a significant greater marked hot flash score improvement with fluoxetine than placebo ($P=.02$). The results were not adjusted for potential confounding influences, including age and tamoxifen use. The fluoxetine was well tolerated.

Conclusion: This dose of fluoxetine resulted in a modest improvement in hot flashes.

Comments:

Strengths/uniqueness:

This paper comes from a group that has an established track record in conducting clinical trials of treatments for hot flashes. The study appears to be methodologically sound.

Weaknesses:

The magnitude of fluoxetine's effect in relieving hot flashes is relatively small, especially considering the significant improvement of this symptom with placebo. As the study

was conducted in patients who were cancer-free, the tolerability data are not generalizable to advanced cancer patients.

Relevance to Palliative Care:

Hot flashes do not appear to be a prominent symptom in the terminal phase of cancer, although they may be more bothersome earlier in the course of disease. For patients who are troubled by this symptom, there is a growing body of evidence supporting the role of antidepressants as a therapeutic option, particularly when hormones are contraindicated. However, the modest symptomatic benefit must be weighed against potential side effects, which tend to be more pronounced in patients with advanced illness.