

Venlafaxine for the Control of Hot Flashes: Results of a Longitudinal Continuation Study

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Purpose/Objectives: To evaluate the intermediate term efficacy and toxicity of the use of venlafaxine for the control of hot flashes.

Design: An open-label continuation phase study following a double-blind, randomized, placebo-controlled clinical trial that tested three doses of venlafaxine for the control of hot flashes.

Setting: North Central Cancer Treatment Group institutions.

Sample: 102 postmenopausal women.

Methods: Women could titrate venlafaxine to optimum efficacy while recording daily hot flash counts and weekly toxicity information.

Main Research Variables: Hot flash frequency, hot flash score.

Findings: The reduction in hot flashes previously reported in the randomized study phase was maintained during the open-label study. Toxicity did not appear to increase over time.

Conclusions: The data from this study provides evidence that venlafaxine has intermediate term efficacy and good tolerability as a treatment for hot flashes.

Implications for Nursing Practice: Nurses can inform symptomatic women that an effective nonhormonal alternative exists to control their hot flashes.

Key Points . . .

- ▶ Hot flashes are a major problem for postmenopausal women, and as a result, effective nonhormonal alternatives are needed for those unable or unwilling to take estrogen.
- ▶ Several nonhormonal alternatives tested to date have less than 50% efficacy against hot flashes, but newer antidepressant agents targeting specific neurotransmitters offer new hope for the management of hot flashes.
- ▶ In a dose of 75 mg per day, extended-release venlafaxine offers a mean 60% reduction in baseline hot flashes.
- ▶ Venlafaxine appears to have intermediate term efficacy against hot flashes with minimal side effects (e.g., mild appetite loss, dry mouth, dissipating nausea).

trogen Deficiency,” 1998). A recent study indicated that the antidepressant venlafaxine reduced hot flash activity by 60% over a four-week period (Loprinzi et al., 2000). This article reports the efficacy and toxicity of venlafaxine for a longitudinal

All women will experience menopause at some point in their lives. Some will experience this prematurely as a result of chemotherapy or hormonal treatment for breast cancer. For many of these women, hot flashes, accompanied by emotional perceptions and behavioral consequences, will be their primary and most disturbing symptom associated with this change (Carpenter & Andrykowski, 1999; Fenlon, 1995; Finck, Barton, Loprinzi, Quella, & Sloan, 1998). Because of the concern that estrogen may lead to the growth of breast cancer cells, women who have had breast cancer often are denied the option of estrogen to control menopausal symptoms, such as hot flashes (“Treatment of Es-

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continuation study beyond the initial four-week randomized treatment period.

Background

Hormone replacement therapy clearly is the most effective known treatment for postmenopausal symptoms (Fenlon, 1995; Greendale, Lee, & Arriola, 1999; Loprinzi et al., 1994), including hot flashes. However, in breast cancer survivors and for those who perceive they are at an increased risk for breast cancer, estrogen is not readily used (Swain, Santen, Burger, & Pritchard, 1999). Similar to estrogen, it is not definitively known if progestones are safe to give to women with a history of breast cancer because they may stimulate tumor growth in some situations (Dew et al., 1998). Therefore, the need for effective nonhormonal alternatives is evident.

Several nonhormonal treatments for hot flashes have been studied. Vitamin E (Barton et al., 1998), clonidine (Goldberg et al., 1994; Pandya et al., 2000), and bupropion (Bergmans, Merkus, Corbey, Schelleken, & Ubachs, 1987) are the most well elucidated. These agents decrease hot flashes, at most, approximately 5%–12% more than the 25% hot flash reduction ascribed to placebos. None of these options come close to the effectiveness seen with hormone replacement, and, except for vitamin E, they can have unwanted side effects. Adverse events associated with bupropion are drowsiness, dizziness, headache, and nausea; for clonidine, drowsiness and constipation have been reported in placebo-controlled trials. Better options are needed.

In response to the need for more effective nonhormonal treatments for hot flashes, anecdotal evidence led to the evaluation of newer antidepressants. Newer antidepressant drugs work differently from the traditional monoamine oxidase inhibitors and tricyclic antidepressants. These newer drugs work on various neurotransmitters, such as serotonin, norepinephrine, and dopamine and increasingly are more specific with regard to the mechanism of action (Kent, 2000). As such, each new antidepressant is a unique chemical compound. Some of the classifications that have been coined to describe these agents include serotonin noradrenergic reuptake inhibitors (SNARIs) and selective noradrenaline reuptake inhibitors (Kent). Venlafaxine (Effexor®, Wyeth-Ayerst Laboratories, Philadelphia, PA) is one such antidepressant. Classified as a SNARI, a venlafaxine pilot trial was conducted to evaluate the utility of low doses of this drug for the control of hot flashes. Venlafaxine inhibits neuronal uptake of serotonin, norepinephrine, and to a lesser extent, dopamine. However, at low doses, this drug is thought to have similar activity as the serotonin reuptake inhibitors, mainly affecting serotonin (Kent).

As the exact pathophysiology of a hot flash has not yet been determined, attempting to conjecture why new selective antidepressants may help to manage hot flashes is difficult. Thermoregulation problems caused by diminished estrogen have been a popular, proposed mechanism for hot flash propagation. However, other, more centrally mediated chemical triggers may be responsible for hot flashes, in conjunction with the effects of estrogen withdrawal (Kronenberg, 1990). Neurotransmitters, such as serotonin, have been among the proposed responsible agents. If true, this could explain why venlafaxine has efficacy against hot flashes.

A pilot trial using venlafaxine conducted by Loprinzi et al. (1998) demonstrated a reduction in hot flashes by approximately 50% from baseline and resulted in the development

and completion of a large, four-arm, randomized, double-blind, placebo-controlled clinical trial evaluating three different doses of venlafaxine in its extended-release formulation (37.5, 75, and 150 mg per day). Built into this trial, which is the subject of another report (Loprinzi et al., 2000), was an open-label continuation phase using venlafaxine for the management of hot flashes beyond the initial four-week treatment period. This phase examined extended efficacy and toxicity data. The open-label portion of the trial is the subject of the current report.

Methods

The original double-blind study evaluated women who either had a history of breast cancer or were concerned about taking hormone replacement therapy because of a perceived increased risk of breast cancer. Hot flashes in this group must have persisted for at least one month with a patient-reported prevalence of at least 14 per week. Each patient was over 18 years of age, had a life expectancy of more than six months, and had an Eastern Cooperative Oncology Group performance rating of 0 or 1, where 0 denotes a fully active patient and 1 denotes a patient who can carry out light work, but is restricted in physically strenuous activity. No concurrent treatment with chemotherapy, corticosteroids, or hormones was permitted. Tamoxifen or raloxifene was allowed if it had not been started in the past month and if it was going to be continued throughout the length of the study. Eligible women had not taken antidepressants in the previous two years, never had taken venlafaxine before, and did not have uncontrolled hypertension.

After obtaining informed consent, women were randomized to receive one of four different treatments. One arm was a placebo. The other three arms involved varying doses of venlafaxine: 37.5 mg daily, 75 mg daily, or 150 mg daily. In the latter two arms, patients received 37.5 mg daily of venlafaxine for the first week, 75 mg daily for the second week, and then the target dose of 75 mg or 150 mg for the last two weeks. The venlafaxine used was an extended-release preparation and was to be taken once each day with food. The double-blind placebo-controlled portion of the study lasted five weeks with the first week consisting of recording prospective baseline hot flash information followed by four weeks of taking an active drug or placebo.

During the first week, participants did not take medication but were instructed to keep a diary of their hot flash frequency and severity. Severity was categorized as mild, moderate, severe, or very severe. Definitions of each category of severity of hot flashes were provided for the women as a guideline. These definitions were derived from a descriptive analysis used in an earlier hot flash study in women (Finck et al., 1998). Participants were instructed to complete a side effect profile, quality-of-life (QOL) instrument, and the Beck Depression Inventory II (BDI-II) weekly. The QOL instrument and BDI-II are established, validated tools (Beck, Steer, & Garbin, 1998; Sloan et al., 1998). The QOL tools, toxicity profile, and diaries have been used in a series of similar hot flash intervention trials involving more than 900 patients (Barton et al., 1998; Loprinzi et al., 1994). In addition to the questionnaires, nurses phoned patients weekly to assess toxicity and protocol compliance and to answer patients' questions.

At the beginning of the second week, participants began taking their assigned treatment medication daily, while continuing to complete their hot flash diaries daily and other ques-

tionnaires weekly. The randomly assigned treatment continued for a total of four weeks. The drugs and placebo were supplied by Wyeth-Ayerst Laboratories.

At the completion of the double-blind portion of the study, women were notified of their treatment assignment and asked if they wished to participate in the open-label phase of the study. Participants were given the option to take venlafaxine provided by Wyeth-Ayerst for an additional eight weeks and to titrate the dose anywhere from 37.5–150 mg daily for optimal effectiveness. If patients agreed to continue on venlafaxine, the patient, nurse, and physician decided which dose of the medication the patient would take during the next week (i.e., week six of the study). The study was designed in such a way that patients would not miss taking the drug on any day; a small amount of open-label medication was given to patients upon entering the randomized study to facilitate the initiation of this continuation phase. If the patient did not want to participate in the continuation phase, the study nurse instructed the patient regarding titration off of the drug.

During the eight-week, open-label continuation phase (weeks 6–13), participants were asked to continue keeping the daily hot flash diary indicating the frequency and severity of their hot flashes in every 24-hour period. They also were to complete a side effect checklist weekly during this phase of the study. Patients did not complete the BDI-II or QOL instruments during this phase of the study. Venlafaxine dose levels were recorded by the healthcare professionals.

Institutions belonging to the cooperative research group, the North Central Cancer Treatment Group, participated in accruing patients to this study. The institutions are largely community-based cancer centers. A total of 19 institutions entered women on the continuation phase of this trial.

Data Analysis

Efficacy measures calculated from the hot flash diaries included hot flash frequency, as well as a hot flash score. Hot flash frequency simply was the number of hot flashes reported in each 24-hour period. The total hot flash score was a combination of the frequency and severity of the hot flashes. A number was assigned for each level of hot flash severity: 1 for mild, 2 for moderate, 3 for severe, and 4 for very severe. The hot flash score was determined by multiplying the patient's mean hot flash severity for the day times the hot flash frequency. The hot flash frequency and hot flash score were the collective bivariate primary endpoint for this study. Data analysis for the continuation phase was mainly descriptive because of the open-label use of the intervention with no comparison group.

Results

Participant Profile

In the double-blind portion of the study, a total of 229 patients were randomized. Seven patients cancelled and one patient was ineligible during this phase, resulting in 221 evaluable patients. The results of the double-blind portion of the study are published elsewhere (Loprinzi et al., 2000). In summary, the placebo-controlled study revealed a 27% reduction in the hot flash score in the placebo arm, a 37% reduction in the 37.5 mg per day arm, and a 61% reduction in hot flashes in the 75 mg per day arm. Increasing the dose to 150 mg per day did not increase efficacy but did increase the number of side effects experienced by participants.

By mid-April 2000, 157 of the 221 patients (71%) had registered for the protocol-continuation phase. Data on dose and efficacy exists for 102 of these patients, and these women were considered evaluable in this current analysis of the continuation phase. Of the 55 registered patients not included in this analysis, weekly venlafaxine dose information was not available for 33 participants, and continuation phase hot flash diary information was not available for an additional 22 patients.

Those women who continued in the open-label phase of the trial were fairly representative of the patients in the double-blind portion of the study. See Table 1 for the demographic characteristics of the women who chose to participate in the continuation phase. Chronologic age, duration of hot flash activity, and tamoxifen use did not appear to influence whether they participated in the open-label continuation phase of the study; however, the trend ($p = 0.06$) toward younger women continuing in the open-label phase was found.

Dose Levels

Almost all ($n = 25$, 93%) of the 27 evaluable participants who were on the placebo during the double-blind phase started the continuation phase with 37.5 mg of venlafaxine per

Table 1. Demographic Characteristics of Evaluable Patients on Continuation Phase

Baseline Factors	Continued on Study (N = 102)	Did Not Continue (N = 119)	p
Treatment arm			0.49
Placebo	27%	24%	
Venlafaxine 37.5 mg	26%	24%	
Venlafaxine 75 mg	26%	24%	
Venlafaxine 150 mg	20%	29%	
Current tamoxifen use^a			0.38
Yes	66%	71%	
No	34%	29%	
Duration of flash symptoms^a			0.77
< 9 months	32%	30%	
≥ 9 months	68%	70%	
Average frequency of hot flashes^a			0.78
2–3 per day	9%	9%	
4–9 per day	47%	49%	
≥ 10 per day	44%	42%	
Race			0.18
White	98%	94%	
Black	2%	6%	
Age (years)			0.06
\bar{x}	53.1	55.0	
Duration of tamoxifen treatment (months)			0.25
N	101	116	
\bar{x}	13.0	14.6	
On study weight (kg)			0.30
N	100	116	
\bar{x}	75.5	77.9	

^aStratification factor

day. One person reported being on 112.5 mg daily and another at 150 mg daily at the initiation of the continuation phase. These dose levels were chosen without knowledge of the results from the double-blind study.

Of the 25 evaluable women who were on 37.5 mg during the first phase of the study, nine (36%) remained at the 37.5 mg dose, and the other 16 (64%) increased their dose to 75 mg per day when they started the continuation phase of the study. Of the 26 evaluable participants who completed the double-blind study at the 75 mg dose, which subsequently was found to be optimal from the double-blind study results, two (8%) decreased their dose to 37.5 mg per day, eight (31%) stayed at 75 mg per day, one (4%) increased to 112.5 mg per day, and 15 (58%) increased their dose to 150 mg per day. Finally, of the 20 evaluable women who initially had been randomized to receive 150 mg daily, eight (40%) reduced their dose to 75 mg per day, two (10%) reduced their dose to 112.5 mg per day, and 10 (50%) continued taking 150 mg per day.

During the first week of the open-label phase, about one-third of the participants were on each of the three dose levels, 37.5 mg per day, 75 mg per day, and 150 mg per day, and four women were taking 112.5 mg per day. These dose distributions are depicted in Figure 1. At the time that the women participated in the continuation phase of this protocol, the results of the randomized portion of the trial were not known.

By the end of the eight-week, open-label phase, daily dose levels were distributed similarly. Thirty-four women were taking 150 mg daily, six (6%) were taking 112.5 mg per day, 35 were taking 75 mg per day, and 26 were taking 37.5 mg per day.

Efficacy of Doses on Open-Label Phase

The patients from each of the four randomized groups who participated in the continuation phase reported a decrease in hot flash activity, which was identified as a 60%–68% mean reduction in hot flash scores from baseline (see Figure 2). Specifically, in the initial placebo group, hot flash scores decreased by 62%, on average, after eight weeks of active treatment. Women who were randomized initially to 37.5 mg also improved their hot flash scores by an additional mean 26% from the last reported values during the randomized study

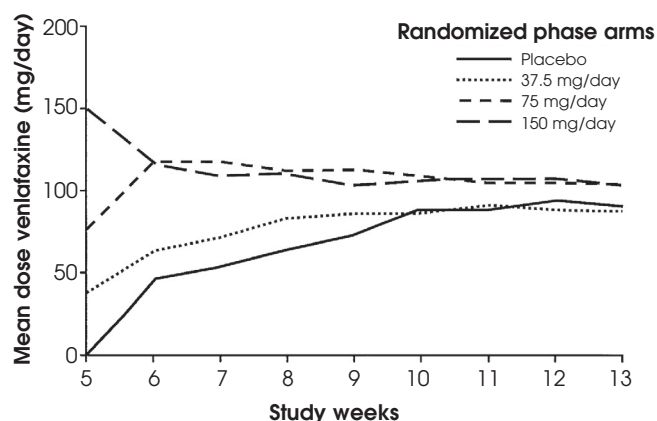


Figure 1. Mean Venlafaxine Doses Used During the Continuation Phase According to Original Assigned Doses

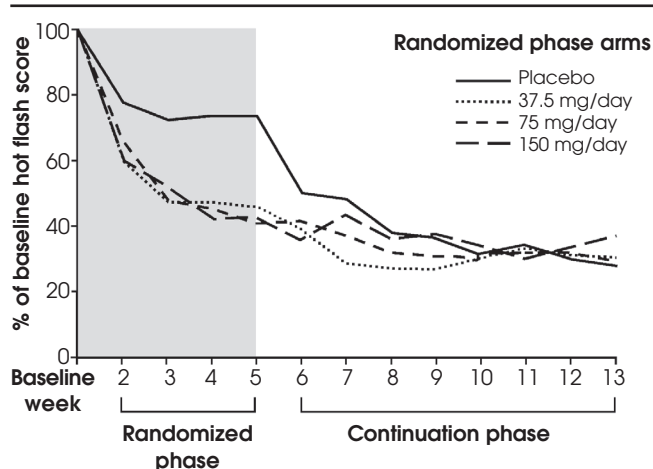


Figure 2. Hot Flash Scores From Baseline Through Week 13 by Venlafaxine Dose

(week five). For the two highest dose groups in the initial randomized study, the approximate 60% reduction in hot flashes seen at the completion of the randomized study was maintained during the open-label study.

To better understand the dose response during the continuation phase, the subset of patients who initially were randomized to receive 37.5 mg per day must be reviewed. This subset of 27 patients is interesting to examine because one-third ($n = 9$) ended up at each possible dose level: 37.5 mg per day, 75 mg per day, and 150 mg per day. A graph of their experience with respect to percent of baseline score is depicted in Figure 3. As shown, patients randomized to 37.5 mg who experienced a good reduction in their hot flashes stayed on that dose throughout the continuation phase and maintained their hot flash reduction. Patients who still had significant hot flashes at week five chose to take either 75 mg or 150 mg in an attempt to further reduce their hot flashes. The curves from both of these doses literally are on top of each other, suggesting, as in the randomized trial, that further decreases in hot flashes were not obtained by increasing the dose of venlafaxine from 75 mg to 150 mg.

Toxicity

Side effects were assessed the same way during the open-label phase and placebo-controlled randomized portion of this trial. Women indicated weekly if they had experienced one or more side effects, including appetite loss, sleepiness, nausea, dizziness, tiredness (fatigue), dry mouth, abnormal sweating, constipation, trouble sleeping, nervousness, and mood changes.

From the randomized, placebo-controlled portion of the study, nausea, appetite loss, constipation (150 mg dose only), and dry mouth were significantly different at the 75 mg or 150 mg dose from patients taking a placebo. Changes from the initial baseline week in each of those toxicities during the continuation phase are illustrated in Figures 4–7. As is illustrated in Figure 4, nausea improved over time. Note the “bump” in Figure 4 between weeks five and seven, representing the nausea reported by the group that was randomized initially to the placebo and began taking venlafaxine at week six. Again, as indicated by this figure, with continued use, nausea associated

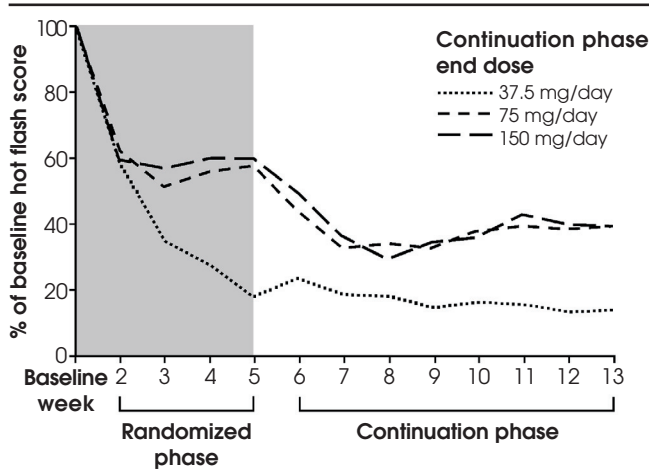


Figure 3. Hot Flash Scores of Patients Receiving 37.5 mg Venlafaxine

with venlafaxine largely subsides over one to two weeks. Appetite loss, constipation, and dry mouth reports are illustrated in Figures 5, 6, and 7, respectively. Throughout the continuation phase, 10% of the women reported experiencing appetite loss, 30% reported constipation, and 41% reported experiencing dry mouth. Baseline reports of these symptoms were 4%, 11%, and 24%, respectively.

Side effects that are feared companions of some antidepressants include sleepiness or nervousness. Neither of these side effects were reported during the continuation phase in numbers significantly greater than the initial baseline counts. Twenty-seven percent of the women reported sleepiness during the baseline week, and 29% reported sleepiness during the continuation phase. Likewise, nervousness was reported by 16% of the women during the initial baseline week, whereas 12% reported nervousness during the continuation phase.

Side effects, including mood changes, trouble sleeping, abnormal sweating, and fatigue/tiredness, were reported by fewer patients during the continuation phase than during the baseline week. Mood changes were reported by 22% of the

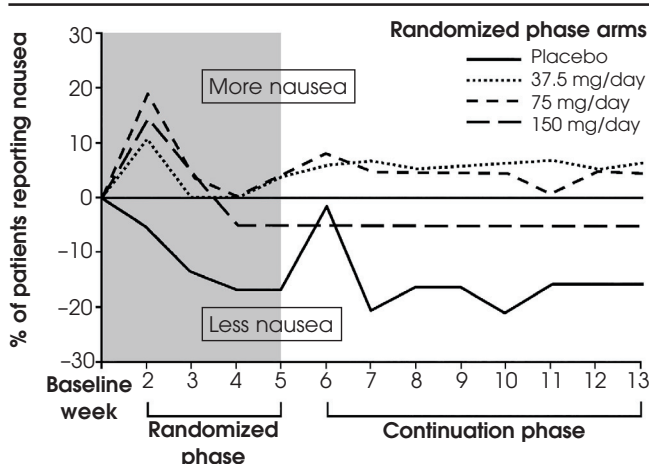


Figure 4. Patterns of Nausea From Baseline Through Week 13

women during the baseline week as opposed to 13% during the continuation phase, trouble sleeping decreased from 65% to 35% from baseline to the continuation phase, and abnormal sweating decreased from a 64% incidence during the baseline week to a 43% incidence during the continuation phase. In addition, tiredness or fatigue was reported by 49% of the women during the baseline week and by 33% of women during the continuation phase. All figures were reconstructed using only the patients that completed the entire 13-week study as a sensitivity analysis relative to patient dropout. Virtually superimposable results were observed.

Discussion

Study Limitations

One of the limitations of this study was the fact that the continuation phase was not a randomized, placebo-controlled trial. The lack of a placebo in the continuation portion of the study makes it difficult to definitively assess the incidence of reported toxicities. Because patients were allowed to openly titrate the drug during the continuation phase, this study cannot provide specific statistical information about dose but, instead, serves more as a supplement to the randomized trial.

Prospective, self-report hot flash diaries indicating frequency and severity were used over objective measures to gauge hot flashes. Potential problems with the use of subjective diaries include the possibility that they might not be completed prospectively (because it would be difficult to remember, with accuracy, how many hot flashes one had and at what magnitude up to seven days before), accurately, or completely. In actuality, recent articles report reliable results using self-report diaries for data collection (Maunsell, Allard, Dorval, & Labbe, 2000; Sherliker & Steptoe, 2000). Although some may view the use of subjective diaries as a study limitation, this study's researchers believed that subjective reporting of such side effects is consistent with the trial's eligibility criteria, which state that hot flashes must be sufficiently bothersome to require a desire for intervention. This is congruent with the conceptual model of symptom management developed by the University of California, San Francisco School of Nursing Symptom Management Faculty Group (1994). This model assumes that symptoms that are perceived as troublesome should be addressed (University of California). This assumption implies a subjective approach to assessment. Even though this clinical trial was developed in the guise of the medical model, this subjective approach to measuring hot flashes is consistent with nursing symptom management theory. Therefore, subjective assessment can be very appropriate in symptom management research.

Management of Hot Flashes

The continuation data compiled from this study provide evidence that venlafaxine has intermediate-term efficacy and good tolerability as a treatment for hot flashes. During the open-label phase, the group that had been assigned to placebo then began to take active drugs experienced a decrease in hot flash scores by about 60% from baseline, which mimics the results found in the randomized trial. Those who already were taking active drugs were able to maintain the 60% drop in hot flash scores over the next two months.

Further data from the continuation phase show that some women responded well to 37.5 mg per day and maintained their low levels of hot flashes over the two months of the con-

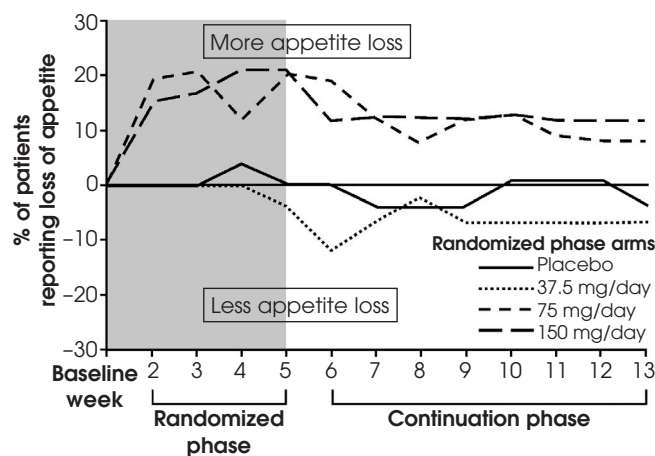


Figure 5. Patterns of Appetite Loss From Baseline Through Week 13

tinuation phase on that dose. Whether these women would have had an even greater reduction in their hot flashes had they increased their venlafaxine dose to 75 mg per day is unknown. Women at both the 75 mg and 150 mg dose reported reduction in hot flash activity by about the same degree, again providing evidence that the optimal response is seen at the 75 mg per day dose of venlafaxine. Final titrated doses tended to end up closer to 75 mg per day than 150 mg per day. This is consistent with the evidence that no additional benefits are seen with doses higher than 75 mg/day.

Toxicities seen in the randomized trial were dry mouth, appetite loss, constipation, and nausea. Nausea was a temporary problem for most patients in the randomized trial (resolving despite continuation of venlafaxine) and did not appear to resurface during the continuation phase. One exception to this was the temporary increase in nausea in the placebo patients who started venlafaxine in the continuation phase. Other side effects (e.g., dry mouth, constipation, appetite loss) were fairly stable throughout the use of the drug.

Difficulty sleeping and fatigue improved over the course of this study. One could speculate that when hot flashes are better

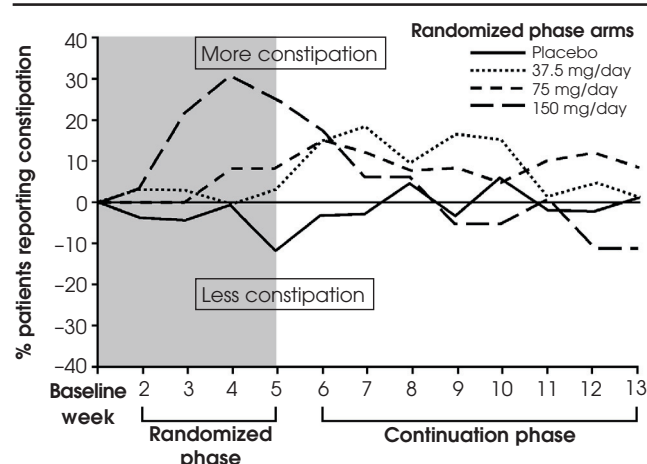


Figure 6. Patterns of Constipation From Baseline Through Week 13

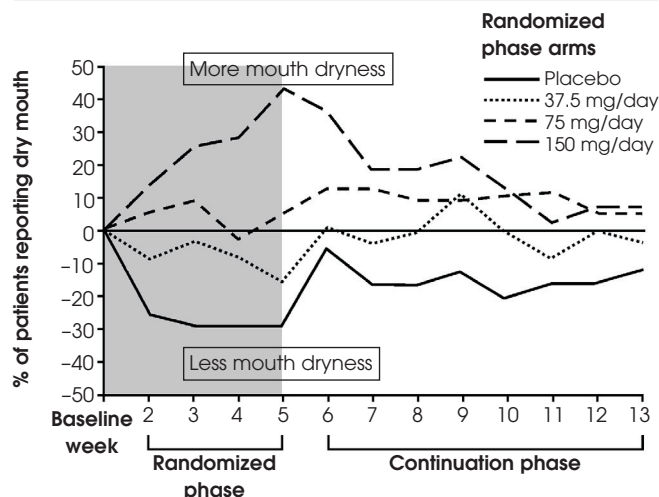


Figure 7. Patterns of Dry Mouth From Baseline Through Week 13

controlled, women experience less sleep disturbance at night, which contributes to a reduction in fatigue. Further evidence to support this claim is found in an abstract by Weitzner, Mazzocca, Jacobsen, and Minton (2000) involving another newer antidepressant, paroxetine. These authors found that a significant decline in fatigue and a significant improvement in sleep quality occurred with the use of paroxetine for hot flash control.

Based on the results from the randomized trial and supporting evidence from this open-label phase study, the current study's researchers have developed a patient information sheet on venlafaxine including recommendations for how to take the drug (see Figure 8). The researchers recommend starting at 37.5 mg (extended-release) daily for one week and titrating up to 75 mg daily only if the individual does not experience good relief at the lower dose. Increasing the dose to 150 mg daily is not recommended because no evidence exists in either phase of this study to indicate increased efficacy, only increased toxicity.

To conclude, the information from this present study further supports the concept that venlafaxine is a helpful nonhormonal agent for attenuating hot flashes in patients who do not wish to receive hormonal therapy. Further research is indicated to determine the most effective and least toxic manner of using these newer drugs for this indication.

Nursing Implications

Oncology nurses often are the healthcare professionals who become aware of menopausal symptoms that interfere with a patient's QOL. While patients undergo chemotherapy for breast cancer, nurses may learn of the onset of amenorrhea and accompanying hot flashes. Often, patients accept these events as an inevitable cost of being diagnosed with breast cancer. Nurses are in a position to both prepare patients for the often premature postmenopausal phenomena, as well as to inform patients about the nonhormonal options for treatment.

A notable finding from the continuation phase relates to mood stabilization. This finding was evidenced by the side effect questionnaire responses, comments made by women in their diaries, and in phone conversations with their research

Venlafaxine (Effexor®) for the Treatment of Hot Flashes

What is venlafaxine (Effexor)?

Venlafaxine is a medicine that is available by prescription for depression. Recent studies conducted, in part, at the Mayo Clinic have shown that low doses of this medicine also are helpful in reducing hot flashes. In these studies, on average, hot flashes decreased by 60% with some patients having more hot flash reduction and others less.

How do I take this medicine for my hot flashes?

You will be given a prescription for 37.5 mg of venlafaxine. This is a long-acting medicine so these pills cannot be crushed or broken. For the first week, you will take one tablet a day. It is important to take this medicine with food because it may lessen any nausea the pill may cause. You may take it in the morning or evening.

During the second week, if you are not happy with the decrease in your hot flashes, begin taking 75 mg per day (two 37.5 mg tablets per day) at the same time each day. You should know whether this medicine is helpful to you by the end of this second week. If it does not help, inform your healthcare provider.

What are the side effects of this medicine?

From studies of the low doses of venlafaxine used, women had only three side effects: dry mouth, loss of appetite, and nausea. Nausea was the worst during the first week of taking the medicine and then got much better. You should not take venlafaxine if your blood pressure is high and not well controlled.

How much does this medication cost?

A 37.5 mg tablet costs about \$2.20 each, and a 75 mg tablet costs about \$2.40 each. Thus, taking one 75 mg tablet is cheaper than two 37.5 mg tablets. You will receive prescriptions for both 37.5 and 75 mg tablets. Check your insurance policy to determine what your prescription benefits are.

What other things can I do for my hot flashes?

Some things in your daily routine may help decrease hot flashes. One of the most important is to dress in layers in loosely woven cotton clothing and use loosely woven bedding. This allows air to flow around your skin better than some tighter fabrics. Also, keep air circulating either with an open window or a fan.

Sometimes foods or beverages can bring on hot flashes. Alcohol, caffeine, and spicy foods may cause a hot flash. Be aware if “trigger” foods exist for you—things that you eat or drink that generally cause hot flashes. Sometimes sucking on ice cubes or sipping an iced fruit drink cools people.

Other medicines have been tested for relieving hot flashes. Ask your doctor about these or any hot flash clinical trials that currently are available. If you have any questions, ask your doctor or nurse.

Figure 8. Patient Information Sheet

nurses. Several women reported being able to “handle stress better” and think more clearly. Others commented that they felt better than ever and had more energy than prior to treatment. This finding makes treatment with venlafaxine a particularly positive intervention, one that perhaps has the potential to target additional symptoms in menopause related to hot flashes.

Nurses need to be aware of the relative efficacy of the non-hormonal treatments for hot flashes, as well as the potential

risks and benefits. They need to assess the degree to which hot flashes are a problem for patients and offer suggestions for treatments that have the best chance of alleviating a particular patient’s symptoms.

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