

FAST FACTS AND CONCEPTS #263
HOT FLASHES IN PALLIATIVE CARE – PART 3**Carolyn Lefkowitz MD and Robert Arnold MD**

Background Assessment and drug treatments of hot flashes ('flushes') were discussed in *Fast Facts* # 261-2; this *Fast Fact* reviews non-drug and complementary/alternative medicine (CAM) therapies. An estimated 50-75% of postmenopausal women use CAM for menopausal symptoms. Several studies have found that women with a history of breast cancer are even more likely than healthy age-matched controls to use CAM for menopausal symptoms including hot flashes. In the breast cancer population, higher likelihood of using CAM is seen in women of younger age, higher education, higher income and participation in regular exercise or support groups.

CAM Pharmacologic Therapies

- **Isoflavones:** studies of isoflavones (black cohosh, dong quai, red clover and soy proteins) have failed to show efficacy.
- **Vitamin E:** one randomized, placebo-controlled crossover trial showed a difference in hot flashes that was statistically, but not clinically significant (one less hot flash per day) (1)
- **Evening primrose oil** (high in omega-6 fatty acids) has not been shown to be more effective than placebo and data from a small trial of an Omega 3 fatty acid preparation ('Loveza') 2 gm/day is inconclusive (2).
- **Magnesium** is appealing because of its low cost (\$0.02/tablet). Two pilot trials without control groups suggested effectiveness; a phase III trial is being developed (3, 4).

Nonpharmacologic Therapies

- **Lifestyle:** Observational studies suggest that avoiding tobacco, keeping ambient temperatures cool and limiting or avoiding caffeine, alcohol, spicy foods and hot liquids may be helpful.
- **Hypnosis:** A few small, uncontrolled studies and one RCT have suggested a beneficial effect of hypnosis on hot flashes. In the randomized trial there was a 68% decrease in the hot flash score compared to pre-intervention ($p < 0.001$), as well as significant improvements in self-reported anxiety, depression, interference of hot flashes with daily activities and sleep. A randomized clinical trial comparing the hypnosis protocol to a placebo control is underway (5).
- **Cognitive behavioral therapy (CBT):** A recent RCT showed benefit of six, weekly, 90 min CBT sessions for hot flashes in women with history of breast cancer (6). Using a 1-10 rating scale, the intervention group had their mean severity score reduced by -1.67 at 9 weeks after randomization, although there was no difference in hot flash frequency. The intervention group also had less depressed mood, fewer sleep problems and better self-reported mental health at 9 weeks after randomization and less pain at 26 weeks.
- **Relaxation therapy:** Two RCTs of relaxation therapy in breast cancer patients were included in a Cochrane review (7). One trial ($n=16$) showed no effect while the other ($n=150$) found a short term decreased incidence and severity of hot flashes and well as decreased distress caused by hot flashes; the effect disappeared by three months.
- **Yoga:** Studies of yoga on overall menopausal symptom burden have shown mixed results, including two RCTs that did not show any improvement in physical symptoms (9,10). One RCT looking at multiple measures of menopausal symptoms did find yoga to be associated with decreased vasomotor symptoms (11). Another RCT found decreased overall menopausal symptom burden, including decrease in a subscale score that included hot flashes (12). The only RCT of yoga where the primary outcome was hot flashes was a trial with $n=37$ of an 8 week yoga program. The intervention group had significantly greater reduction in hot flash frequency and severity and the effect persisted at 3 months (13).
- **Acupuncture, Homeopathy, Exercise:** systematic reviews report mixed results with acupuncture and no benefit with homeopathy or exercise. Of note, the paucity of rigorous trials and the heterogeneity of research populations challenged the very process of meta-analysis (7,8).

Conclusion It is difficult to make general recommendations regarding use of complementary and alternative therapies for hot flashes because the evidence base is generally limited to studies of small

size and short duration. The therapies with the best evidence of efficacy, all of which have low side-effect burden, are magnesium, hypnosis, cognitive behavioral therapy, and yoga.

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