

Managing Hot Flashes After Breast Cancer

Janet S. Carpenter, PhD, RN, AOCN, and Beth Lambert, MSN, RN

Case Study

Mrs. C is a 49-year-old married woman who was diagnosed with breast cancer 16 months ago. She underwent a right modified radical mastectomy with immediate reconstruction followed by six cycles of adjuvant cyclophosphamide, methotrexate, and 5-fluorouracil. She completed treatment 10 months ago and is currently disease free. Because her tumor was estrogen-receptor positive/progesterone-receptor positive, she has been taking tamoxifen for the past year and will continue to take it for another four years.

Mrs. C experienced a natural menopause six years ago and was treated with hormone replacement therapy until being diagnosed with breast cancer. Mrs. C is a very active woman who works full-time, has three grown children, and is very involved in community projects. She currently is most bothered by hot flashes. She averages 20 hot flashes per day and often wakes in the middle of the night "soaking wet." Because her hot flashes are unpredictable, adjusting her schedule around them is impossible. She states that at first she starts "to get really warm and flushed." Then, she starts "to sweat, and nothing will stop it until it has run its course." She admits to being very embarrassed about her hot flashes and perspiration around people who do not know her well. Mrs. C feels her healthcare professionals dismiss her reports of hot flashes, leaving her to believe nothing can alleviate them. She feels her quality of life has suffered immensely because her hot flashes cause a lack of sleep, which, in turn, leaves her irritable, fatigued, and with a decreased ability to concentrate.

What factors have placed Mrs. C at risk for hot flashes? Is her experience with hot flashes unusual? What treatment options are available to help her?

*Beth Lambert, MSN, RN
Research Clinical Specialist
Clinical Trials Office
Vanderbilt-Ingram Cancer Center
Nashville, TN*

Discussion

Risk factors for hot flashes: Mrs. C is at risk for hot flashes for several reasons. Like healthy women, she may be experiencing hot flashes as part of the natural aging process (Kronenberg, 1990). However, unlike healthy women who can be treated with hormone replacement therapy (HRT) to relieve hot flashes, Mrs. C discontinued her HRT when she was diagnosed with breast cancer based on recommendations from her healthcare professionals. Using HRT to treat women with breast cancer is controversial at best (Canney & Hatton, 1994; Cobleigh et al., 1994; Smith, Kammerer-Doak, Barbo, & Sarto, 1996; Swain, Santen, Burger, & Pritchard, 1999b; Wile, Opfell, & Margileth, 1993) and, more often, is contraindicated (Brzezinski, 1995; Runowicz, 1996). Although some clinicians advocate HRT for women with breast cancer (Cobleigh et al.; Smith et al.), data suggest only 31% of this population would consider HRT if offered (Couzi, Helzlsouer, & Fetting, 1995) and only 5% or less actually are treated with HRT after diagnosis (Swain, Santen, Burger, & Pritchard, 1999c).

Mrs. C's cancer treatment also may be causing her hot flashes. Although chemotherapy did not cause Mrs. C to experience an artificial menopause, the cyclophosphamide-based regimen she received may have caused some ovarian disruption (Reichman & Green, 1994). In addition, Mrs. C's hot flashes are a known side effect of tamoxifen (Carpenter et al., 1998; Pasacreta & McCorkle, 1998). Postmenopausal tamoxifen users are 2.6 times more likely to experience severe hot flashes than nonusers (Carpenter et al., 1998).

The hot flash experience: Mrs. C's experience with frequent, severe, and distressing hot flashes is not unusual. Approximately 65% of breast cancer survivors experience hot flashes (Carpenter et al., 1998; Couzi et al., 1995), and at least 45% experience daily hot flashes (Carpenter, Andrykowski, Freedman, & Munn, 1999). Physiologic hot flash monitoring has validated as many as 30 hot flashes per day in some women with breast cancer (Carpenter et al., 1999). In addition, 71% (Couzi et al.) to 82% (Carpenter et al., 1998) of women with breast cancer state that their hot flashes are moderately to extremely severe, and 44% state that they are extremely bothersome (Carpenter et al., 1998). In addition, women who report more menopausal symptoms, including hot flashes, following treatment for breast cancer report more severe fatigue ($p < 0.01$), with menopausal symptoms predicting 36% of the variability in fatigue severity (Broeckel, Jacobsen, Horton, Balducci, & Lyman, 1998).

Hot flash treatment options: Unfortunately, the scientific basis for managing hot flashes in women with breast cancer is limited. In general, many strategies are com-