Breast Cancer Survivorship Issues

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KEYWORDS

- Vasomotor symptoms • Sexual dysfunction • Infertility • Osteoporosis
- Musculoskeletal pain • Cognitive changes • Neuropathy
- Treatment-related cancers

KEY POINTS

- Surveillance after early stage breast cancer should include routine mammograms, physical examinations, and histories, but not blood work or imaging focused on possible distant sites of relapse.
- Vasomotor symptoms, sexual dysfunction, infertility, osteoporosis, musculoskeletal pain, weight gain, cognitive changes, fatigue, neuropathy, congestive heart failure, and treatment-related cancers can all plague survivors of breast cancer.
- Efforts are underway to coordinate follow-up care for survivors of breast cancer and to optimize management of the physical, mental, and emotional sequelae of breast cancer and breast cancer treatment.

SURVEILLANCE OF SURVIVORS OF BREAST CANCER

In the 1980s, it was common to follow early stage survivors of breast cancer with multiple blood tests, chest radiographs, and other imaging (eg, bone scans). This practice was not evidence-based, and arose primarily from clinician biases. When patients are followed on clinical protocols with histories, physical examinations, chest radiographs, blood work, and bone scans, approximately 75% of recurrences are first recognized by history or physical examination.[1] In the other 25% of patients, approximately a third of recurrences are each detected by abnormalities in chest radiographs, bone scans, and liver function tests. Virtually no recurrences are identified

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based on complete blood count abnormalities. Although blood work or imaging may identify the first evidence of distant recurrence in a minority of cases, this is only clinically important if detecting these recurrences while a patient is still asymptomatic improves quantity or quality of life (QOL).

In the 1990s, American Society of Clinical Oncology (ASCO) developed practice guidelines regarding follow-up surveillance in patients with a history of breast cancer that had been treated for cure.[2] These guidelines were largely influenced by two Italian studies that prospectively evaluated more intensive surveillance strategies, compared with following a patient by history, physical examination, and mammography.[3,4] These ASCO guidelines were updated, predominantly unchanged, in 2006[5]; they state that the primary surveillance procedures for asymptomatic survivors of breast cancer should include intermittent patient histories and physical examinations every 3 to 6 months during the first 3 years, every 6 to 12 months during years 4 to 5, and annually thereafter; and annual mammography for patients with residual breast tissue, with the first one scheduled at least 6 months after completion of breast radiation therapy. Patients should be educated with regard to symptoms of breast cancer recurrence, and they should be instructed to call a provider if questions or problems arise. Genetic counseling should be offered to those whose personal or family history is suggestive of a genetic cancer syndrome. Regular gynecologic follow-up is recommended for most patients; patients on tamoxifen should be alerted to report abnormal bleeding.

ASCO guidelines specifically recommend against routine blood counts, liver function tests, and tumor markers (eg, carcinoembryonic antigen), and routine radiologic tests other than mammograms (eg, chest radiographs, bone scans, computed tomography scans, positron emission tomography scans, and breast magnetic resonance imaging tests). Newer data, however, do support the use of surveillance breast magnetic resonance imaging in certain patient subsets (eg, those with BRCA mutations and residual breast tissue).[6] ASCO provides patient information material that can be helpful to give to patients who have questions about breast cancer surveillance testing.

BOTHERSOME SYMPTOMS

Vasomotor Symptoms Caused by Chemotherapy-related Amenorrhea and Hormonal Therapies

Vasomotor symptoms occur in 65% to 96% of women treated for breast cancer.[7] In survivors of breast cancer, vasomotor symptoms are often longer lasting and more severe than in the general population. These negatively impact QOL, sleep, and compliance with medications. Breast cancer therapies can cause hot flashes by abruptly interrupting ovarian function (with chemotherapy, ovarian inhibition, and oophorectomy); decreasing estrogen concentrations (aromatase inhibitors [AI]); or decreasing the sensitivity of tissues to estrogen (tamoxifen). Discontinuation of hormone-replacement therapy can also cause problematic symptoms.

Hot flashes are the most common adverse events of adjuvant endocrine therapies, with a prevalence of 50% to 70% in patients treated with tamoxifen.[8] In this setting, the frequency and severity of hot flashes usually increase during the first 3 months of treatment, after which they plateau. Compared with tamoxifen, the AIs are slightly less likely to cause hot flashes.[9] In general, the symptoms that result from chemotherapy-induced menopause are more severe than those associated with natural menopause.

Lifestyle options for hot flash relief (eg, keeping the room cold; avoiding spices, caffeine, and hot fluids; using a fan and cooling pillows; and dressing in layers) are