

Caring for breast cancer survivors in the primary care setting

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The number of breast cancer survivors (BCSs) in the United States continues to grow annually, leaving many survivors in need of healthcare providers with a firm understanding of survivorship care. Nurse practitioners in primary care settings are uniquely positioned to provide the skilled care necessary for BCSs. This article provides an overview of coordinating surveillance, managing long-term effects, and focusing on health promotion in this growing population.

KEY WORDS: breast cancer, survivorship, surveillance, health promotion

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As of January 2022, the number of women living with a history of invasive breast cancer in the United States was estimated at over 4 million, demonstrating the need for practitioners competent in providing care to this population.¹ The benefits of BCSs having follow-up with both their oncology team as well as primary care providers (PCPs) have been documented. However, many survivors will ultimately be released after routine oncology team surveillance to follow up with their PCP. A PCP can provide survivorship care in settings where specialists are limited and in cases in which BCSs encounter barriers to continuing oncologic care.² Survivorship visits are important for evaluating treatment-related toxicities, risk for recurrence, improving adherence to long-term therapies, and encouraging healthy lifestyle modifications. Studies have shown, however, that survivorship care may be underutilized and lead to poor adherence to recommended guidelines.³ This article aims to help bridge that gap by addressing surveillance, assessment for and management of long-term effects, and health promotion that can be readily provided by nurse practitioners (NPs) in primary care settings.

Surveillance

The BCS needs a thorough history and physical assessment that includes cancer-related details, and clinical follow-up should be indi-



vidualized based on their specific diagnosis, age, and treatments. It is recommended that BCSs have a history and physical exam every 3 to 6 months for the first 3 years after treatment, every 6 to 12 months for the next 2 years, and then annually.⁴ The *Box* provides an overview of recommended assessment components.⁵ These surveillance visits are often in collaboration with the oncologic team, and the frequency of visits should be adjusted based on the patient's involved care team. Signs and symptoms of locoregional recurrence should be discussed, such as changes on self-breast exam including breast masses, skin changes to the breast or chest wall, and changes in the shape or contour of the breast or arm. Screening for additional cancers should continue as recommended for the general population, except in the setting of increased risk based on the presence of genetic susceptibilities (eg, hereditary cancer syndromes), personal risk factors, or familial risk.⁵

Annual bilateral screening mammography is recommended for women who undergo breast-conserving surgery. Women who undergo unilateral mastectomy should receive annual screening mammography of the contralateral breast. More frequent image monitoring should only be performed for follow-up of any suspicious findings.⁴ Of note, it is not recommended to routinely order breast magnetic resonance imaging (MRI) in BCSs. Breast MRI may be indicated in patients who meet established guidelines for increased breast cancer risk but should not be included in routine annual surveillance for women at average risk of recurrence. Genetic evaluation and testing should be offered to patients who meet criteria. Risk factors and ge-

netic evaluation are outlined in the National Comprehensive Cancer Network (NCCN) guidelines on genetic/familial high-risk assessment for breast, ovarian, and pancreatic cancers.⁶ Tumor markers, complete blood counts, liver function tests, and imaging of the chest, abdomen, pelvis, and bone should not be routinely ordered in surveillance for recurrence or screening for new primary cancers.⁷ Patients may request multiple tests because they have anxiety and fear in regard to cancer recurrence, metastasis, or a new cancer. The PCP should recognize these fears and explain that performing these tests for asymptomatic disease does not result in earlier detection or improved survival.² They can offer reassurance that regular follow-up visits, reporting of any symptoms, keeping up to date on routinely recommended cancer screening, adhering to adjuvant endocrine therapy, and adopting a healthy lifestyle are the keys to both cancer prevention and early detection.

Long-term effects

The late and long-term effects of breast cancer therapies are numerous. This article focuses on assessment and management of some of the most common long-term effects reported by BCSs including lymphedema, cognitive function decline, depression and anxiety, fatigue, pain, sexual dysfunction, bone loss, and vasomotor symptoms. The American Cancer Society/American Society of Clinical Oncology guideline on breast cancer survivorship care includes informative tables on the late and long-term effects, as well as assessment and management of these problems.⁴ Specific pharmacologic management of the long-term effects discussed here is outside the scope of this article, but resources for pharmacologic

Box. Assessment components of the survivorship visit

- Current disease status
- Functional/performance status
- Medication use
- Comorbidities
- Prior cancer treatment history
- Family history
- Psychosocial factors
- Modifiable risk factors (eg, weight, diet, tobacco, alcohol use)

treatment are available in the NCCN survivorship guidelines.⁵

Breast cancer survivors who underwent lymph node excision, whether a sentinel lymph node resection or axillary lymph node dissection, and those who have had radiation therapy are at increased risk for developing lymphedema.^{4,5} The majority of cases of lymphedema are diagnosed within 3 years of treatment but can develop anytime in the life of the survivor and can be acute or chronic.⁵ Factors that further increase the risk for lymphedema include elevated body mass index (BMI), local infections, increasing number of nodes removed, and a higher extent of disease. Importantly, evidence suggests that venipuncture and blood pressure measurement in the affected arm, as well as air travel, are not associated with an increased risk for development of lymphedema. As such, precautionary behaviors related to these are no longer necessary.⁸ Patients should be evaluated for swelling or symptoms of fullness, tightness, or heaviness of the ipsilateral arm or breast and referred to a physical therapist, preferably a lymphedema specialist, for management when indicated. Early detection is important for optimal management and prevention of more severe stages that are less responsive to treatment. Breast cancer survivors can be reassured that lymphedema is

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not a contraindication for physical activity and precautions are not necessary for cardiovascular or strength exercises.⁵

Cognitive functioning should be evaluated and concerns addressed. Some decline in cognitive function can be seen in BCSs following treatment. This is often evidenced by patient self reports. Neuropsychological testing and brain imaging have demonstrated abnormalities in patients treated for cancer. Unfortunately, validated screening tools and guidelines for management are lacking.⁵ The PCP can ask the patient if they have noticed any increased difficulty multitasking or paying attention, difficulty remembering things, or a sense that thinking seems slow and listen to family members/caretakers reporting of cognitive function changes. Individuals with identified cognitive function impairment should be referred to a neuropsychologist for further testing, and imaging of the brain should be obtained if there is suspicion for metastatic disease. Underlying conditions such as depression, anxiety, and fear of cancer recurrence are common in cancer survivors and may contribute to worsening cognition. The PCP can reassure the patient that change in cognitive function is usually not progressive and offer self-management and coping strategies (eg, yoga, meditation, physical activity, limiting alcohol intake, practicing mindfulness, cognitive training).⁵

Patients should receive comprehensive assessment utilizing validated depression and anxiety screening tools such as the Patient Health Questionnaire (PHQ)-9 or PHQ-2 and Generalized Anxiety Disorder-7. Recommended nonpharmacologic interventions for depression and anxiety include regular physical activity, healthy nutrition, integrative therapies (eg, mindfulness, meditation, yoga, cognitive behavior therapy), attention to underlying symptoms (eg, fatigue, pain) and treatment of comorbid conditions that may contribute to depression and anxiety. Pharmacologic treatment may be considered. Referral to licensed therapists, counselors, and mental health professionals should be discussed and offered when indicated.⁵

Subjective negative experiences such as pain and fatigue vary among survivors and should be adequately assessed with history and physical exam and instructions for self-monitoring. In BCSs who present with the report of pain, providers should be mindful to rule out concerns for cancer recurrence or metastasis. The BCS with cancer-related fatigue may report physical, emotional, and/or cognitive tiredness or exhaustion that is not proportional to recent activity and that is interfering with daily functioning.⁵ It is important when the patient presents with subjective experiences to evaluate and treat comorbid conditions that may

be contributing to their symptoms. Nonpharmacologic interventions should be recommended first as well as utilization of resources such as physical and occupational therapy and psychosocial interventions. For more in-depth recommendations including pharmacologic interventions, see NCCN's guidelines on cancer-related fatigue and adult cancer pain.^{9,10}

High levels of evidence support regular sexual function screening for BCSs can lead to improved patient satisfaction and quality of life (QOL).¹¹ The FSFI-BC [Female Sexual Function Index adaptation for breast cancer patients] is an evidence-based, validated tool to screen for sexual dysfunction among breast cancer survivors.¹² Symptoms of sexual dysfunction include dyspareunia, low libido, or difficulty achieving orgasm and are common among BCSs. Assessment of dyspareunia should include evaluating for signs and symptoms of estrogen deprivation and current use of endocrine (antiestrogen) therapies. Nonpharmacologic treatment for dyspareunia related to vaginal dryness may include lubricants and moisturizers. Some hormonal therapies commonly used for vaginal dryness are contraindicated especially if the patient had an estrogen-dependent cancer. However, low-dose vaginal estrogen may be an option for some BCSs when nonpharmacologic management is not effective.¹³ Consultation with the patient's oncology specialist is indicated.

For patients experiencing low libido or difficulty achieving orgasm, psychological assessment for associated anxiety or depression is important as well as a review of medications and other comorbidities that may impact sexual function.¹⁴ Pharmacologic management of low

libido can be discussed. Patients should be offered a referral to a therapist certified in sexual health. A directory of providers is available through the American Association of Sexuality Educators, Counselors, and Therapists.^A

Bone loss can be significant among BCSs, and multiple breast cancer therapies are associated with increased risk for osteoporosis. Along with normal age-related bone loss and lifestyle habits, treatments such as aromatase inhibitors (AI), GnRH agonists, and chemotherapy-induced premature menopause are risk factors to consider when evaluating bone health. A DEXA [dual-energy X-ray absorptiometry] scan should be obtained in all postmenopausal patients taking an AI and repeated every 2 years.¹⁵ Decisions concerning pharmacologic management of AI-associated bone loss in postmenopausal women are based on bone mass density T scores and individual risk factors for fragility fractures.¹⁶ BCSs should be counseled on lifestyle modifications to reduce bone loss such as regular weight-bearing exercise, limiting alcohol use, and avoidance of tobacco use. Postmenopausal women should be encouraged to meet a daily intake of calcium of 1,200 mg/day and 800 to 1,000 IU/day of vitamin D3 to support bone health.¹⁷

Vasomotor symptoms are another common symptom reported among BCSs. This may be due to premature menopause related to chemotherapy, but these can be a side effect of endocrine therapies, particularly tamoxifen. Breast cancer survivors with hot flashes impacting QOL can be offered nonhormonal pharmacologic management with selective serotonin-norepinephrine reuptake inhibitors, selective serotonin reuptake inhibitors, or gabapentin. Lifestyle and environmental

adaptations have been studied with variable results regarding effectiveness. These include exercise, vitamins, keeping the environment cool, and dressing in layers, as well as avoiding spicy foods and limiting alcohol and caffeine intake. There is some support for the effectiveness of acupuncture in reducing hot flashes.⁴ Isoflavones, a major class of phytoestrogens, are found in soybeans and soy products. They have estrogenic qualities and may have positive effects for treatment of hot flashes.¹⁸ Their use has been a long-debated topic among BCSs. Most data have shown that moderate consumption, defined as less than or equal to three servings of whole soy foods a day, is not linked to an increased breast cancer risk.¹⁹

Health promotion

Breast cancer survivorship care should include not only management of the after effects of therapy and continued monitoring but also focus on health promotion and reducing the risk of recurrence and new cancers. Practitioners providing primary care are well prepared to discuss health promotion tailored to the specific needs of the patient. Healthy lifestyle habits surrounding physical activity, nutrition, weight management, and avoidance of alcohol and tobacco use should be encouraged.⁵

Activity recommendations should be tailored to the individual patient and should provide specific suggestions to include frequency, intensity, type, and time of activity. Advising specific activities may be helpful in increasing adherence and reducing confusion on the level of activity recommended. Patients should be counseled to avoid long periods of inactivity, and routine follow-up should be scheduled



to assess tolerability of the recommended exercises. A broadly accepted guideline for physical activity is at least 150 minutes, with an upper limit goal of 300 minutes, of moderate-intensity physical activity, or 75 minutes of vigorous-intensity activity spread throughout the course of a week. Stretching, core, and strength training are an integral piece of physical activity that should be incorporated two to three times a week to help reduce the risk of falls and improve bone strength.²⁰ The NCCN survivorship guidelines include a detailed table listing light, moderate, and vigorous exercise examples.⁵

Proper nutrition is integral to health and recovery during active breast cancer treatment, and it should be a focus of health promotion in the survivorship setting. A dietary assessment should be performed, and individuals should be counseled on their ideal body



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weight and healthy eating and weight management for both underweight and overweight. Weight loss in patients who are overweight or obese through dietary change has been shown to positively impact the risk of recurrence and overall prognosis. It is recommended BCSs eat a diet high in fruits, vegetables, and whole grains as well as limit red meat, processed foods, and refined sugars.²¹ For additional education on food plate volumes, daily nutrient requirements, and healthy recipes, patients may be guided to the US Department of Agriculture MyPlate website.^B

Excess alcohol intake is associated with higher risks of cancer. The intake recommendation for women is less than one drink per day, regardless of type of alcohol. Lower consumption of alcohol is associated with a lower risk of recurrence and a new primary cancer.²² Tobacco use should be assessed, and individuals who are tobacco users should be provided with resources for smoking cessation, which can be found in the NCCN smoking cessation guidelines.²³ Finally, while dietary supplements may be indicated in individuals with documented deficiencies, inadequate dietary intake, or associated comorbidities, national organizations do not recommend routine supplement use for cancer risk reduction.⁵

Survivorship care plan and care coordination

The transition of follow-up care from the oncology team to a PCP can be a time of uncertainty for BCSs. However, studies have shown that BCSs following with a PCP have similar rates of recurrence-related events, quality of life, and satisfaction with care.²⁴ Breast cancer survivors who do not receive a survivorship care plan from their oncologic team may be guided to the American Society of Clinical Oncology website, which provides outlines for building a care plan.^C The care plan should be reviewed by the PCP and should include a thorough summary of the type and stage of cancer, and specific treatment that was received. The plan also should provide recommendations for follow-up visits, imaging surveillance, and laboratory tests, as well as signs of recurrence or late effects of treatment. Assessment should be provided at least annually and any care related to a BCS's oncologic history should be communicated with the oncology team to promote multidisciplinary care coordination.⁴ It should be noted that providing comprehensive survivorship care can be more time consuming than routine wellness visits, and there currently are no established billing codes specifically designed for survivorship care.²⁵

It is imperative to recognize barriers to care, and acknowledge healthcare disparities among BCSs. Breast cancer survivors in minority racial and ethnic groups often have decreased access to care, are more likely to be uninsured, and are more likely to experience comorbidities with significant impact on their health than are others in the US.²⁶ This article aims to equip PCPs with evidence-based management for survivorship care to facilitate increased access to high-quality, patient-centered care.

Practice implications

It is important to help breast cancer survivors feel supported throughout the years following their treatment. The NCCN survivorship guidelines provide an in-depth table of web-based, mobile device apps and other electronic resources on all aspects of survivorship care for both providers and patients.⁵ Nurse practitioners in the primary care setting have the opportunity to partner with BCSs and oncology providers to deliver supportive, in-depth survivorship care with a focus on surveillance, identification, and management of long-term effects and health promotion. ■

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Web resources

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- B. <https://www.myplate.gov>
- C. <https://cancer.net/survivorship/low-care-after-cancer-treatment/asco-cancer-treatment-and-survivorship-care-plans>