a normal life expectancy. The survival of patients with breast cancer has continued to improve over the last several decades because of improved early detection and more effective therapy (see Fig. 59-2). The rapidly increasing number of breast cancer survivors necessitates consideration of a number of important issues, including monitoring for cancer recurrence and management of the delayed and long-term physical and emotional effects of cancer and cancer treatment. Local disease recurrence should be detected early and treated with curative intent. Patients with a prior history of breast cancer are at increased risk for a second primary breast cancer in the ipsilateral or contralateral breast. However, there is no evidence that additional laboratory or imaging procedures (beyond a careful history and physical examination and appropriate screening imaging recommendations) provide further benefit in asymptomatic breast cancer survivors. Patients previously treated with chemotherapy, especially anthracyclines and alkylating agents, are at increased risk for acute myeloid leukemia or myelodysplastic syndrome, although these sequelae are uncommon. Anthracyclines and trastuzumab therapy also increase the risk for congestive heart failure.

The most common symptoms in longer-term breast cancer survivors are fatigue, depression, and sexual dysfunction. Fatigue appears to be the most common post-treatment symptom but is often underreported. Patients with fatigue should be evaluated for early signs of congestive heart failure due to prior therapy with anthracyclines or trastuzumab. Likewise, menopausal symptoms with hot flashes due to ovarian suppression from chemotherapy or the direct effects of endocrine therapy may contribute to fatigue.

Breast cancer survivors should be encouraged to follow a healthy lifestyle including an appropriate low fat diet, regular exercise, and limited alcohol consumption. Recently updated guidelines from the American Society of Clinical Oncology for breast cancer follow-up recommend regular history taking and physical examination every 3 to 6 months for 3 years after the initial diagnosis, followed by annual or biannual follow-up for 2 years and annual follow-up thereafter. It is also appropriate for many lower-risk patients to consider transitioning to a specialized survivorship program or primary care follow-up after the first year.

Improved understanding of the underlying biology of breast cancer along with the complexity of available diagnostic, prognostic, and therapeutic interventions has resulted in a compelling need for close coordination and integration of multiple specialty fields for the optimal care of patients with breast cancer. As efforts to detect breast cancer early and therapeutic interventions continue to improve, increasing importance must be placed on the most appropriate strategies for monitoring and managing the long-term consequences of breast cancer and its treatment in order to provide patients with the best chance for living a long and successful life as breast cancer survivors.

For a deeper discussion on this topic, please see Chapter 198, "Breast Cancer and Benign Breast Disorders," in Goldman-Cecil Medicine, *25th Edition.*

SUGGESTED READINGS

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