Breast Cancer Screening 19

An educational service of NetCE

Ask Your Patients...

"Have you had a mammogram?"

If Your Patient Asks...

"Should I be checking myself for breast cancer?"

UNDERSTAND the problem

There were 2.8 million breast cancer survivors in the United States in 2015, and nearly 300,000 additional women are diagnosed with the disease each year.[1] Breast Cancer is diagnosed more frequently in women than any other cancer (with the exception of skin cancer) and carries the second highest mortality rate after lung cancer. An estimated 231,840 women will be diagnosed with an invasive breast cancer in 2015, and an additional 60,290 women will be diagnosed with in situ breast cancer, primarily ductal carcinoma in situ (DCIS).[1]

Due in part to the increasing number of women undergoing breast cancer screenings, breast cancer incidence has been steadily decreasing since 2000, although in recent years it appears to have plateaued.[1] Healthcare professionals should take every opportunity to educate and emphasize the goal of breast cancer screening: early detection reduces mortality.

WHO is at risk

There are no clearly defined criteria to determine "high" risk of developing breast cancer. The general consensus is that a genetic mutation, such as the breast cancer tumor suppressor genes BRCA1 or BRCA2, and presence of a high number of first- and second-degree relatives with a breast cancer diagnosis fit into this category.[2] In reality, however, only 5% to 10% of all breast cancers are caused by mutations BRCA1 and BRCA2.

In the United States, non-Hispanic white women have the highest incidence rate overall, although rates vary by age. For example, black women younger than 45 years of age have greater incidence rate than their white counterparts.[1] Black women are generally diagnosed with a more advanced and aggressive disease, which carries a poorer prognosis and lower survival rate.[3]

WHAT are the screening recommendations

In addition to the history and physical examination, breast cancer screening includes breast self awareness, clinical breast examination (CBE), and mammography.

Average-Risk Women

Counseling should begin at 20 years of age and include information on the early signs and symptoms of breast cancer and a recommendation for CBE at least every 3 years. This should continue until 39 years of age, after which annual CBE and mammography should begin.[4]

High-Risk Women

Beginning at 30 years of age, annual mammography and MRI are recommended for women if they have:[5]

- A risk assessment score greater than 20% to 25% (e.g., using BRCAPRO)
- A known history of breast cancer in a first-degree family member
- An established BRCA mutation

Childhood Cancer Survivors

Women 25 years of age and older who received mantle radiation for childhood Hodgkin lymphoma should be followed very closely by a skilled healthcare professional. Intensified surveillance for survivors involves CBE every 6 to 12 months, continual breast awareness, and scheduled yearly mammograms. Mammograms should begin within 8 to 10 years after the radiation ceased or at 25 years of age. Annual MRI is also recommended, although the efficacy of this continues to be debated.[6]

HOW to improve screening rates

The majority of women who undergo mammography do so due to healthcare professionals' recommendations and endorsements.[7] If 5% more women underwent mammography each year, as many as 560 deaths could be prevented annually. Healthcare professionals have an obligation to educate and endorse the guidelines for breast cancer screening recommendations in order to improve the screening rate and overall survival.

With the use of screening mammography, approximately 75% of breast cancers are detected in women 40 to 49 years of age and 90% are detected in women in their 60s. These statistics are encouraging, but research indicates thousands of women without insurance, of certain racial/ethnic minorities, and with lower levels of education undergo screening either sporadically or not at all. These groups require targeted outreach to improve screening rates and prognosis.[8]

WHERE to find resources

American Cancer Society
http://www.cancer.org

American Congress of Obstetricians and Gynecologists
http://www.acog.org

American Society of Clinical Oncology
http://www.asco.org

National Breast Cancer Foundation, Inc.
http://www.nationalbreastcancer.org

National Cancer Institute: Breast Cancer
http://www.cancer.gov/cancertopics/types/breast

1 American Cancer Society. What Are the Key Statistics about Breast Cancer? Available at http://www.cancer.org/cancer/breastcancer/detailedguide/breast-cancer-key-statistics. Last accessed July 20, 2015.

2 Baltzell K, Wrensch MR. Strengths and limitations of breast cancer risk assessment. *Oncol Nurs Forum*. 2005;32(3):605-614.

3 Willett W, Tamimi RM, Hankinson SE, Hunter DJ, Colditz GA. Nongenetic factors in the causation of breast cancer. In: Harris JR, Lippman ME, Morrow M, Osborne CK (eds). *Diseases of the Breast*. 4th ed. Philadelphia, PA: Lippincott, Williams & Wilkins; 2010: 248-290.

4 Smith RA, Cokkinides V, Brooks D, Saslow D, Brawley OW. Cancer screening in the United States, 2010: a review of current American Cancer Society guidelines and issues in cancer screening. *CA Cancer J Clin*. 2010;60(2):99-119.

5 Robertson FM, Bondy M, Yang W, et al. Inflammatory breast cancer: the disease, the biology, the treatment. *CA Cancer J Clin*. 2010;60(6):351-376.

6 Children's Oncology Group. Long-Term Follow-up Guidelines for Survivors of Childhood, Adolescent, and Young Adult Cancers. Version 3.0. Available at http://www.survivorshipguidelines.org/pdf/LTFUGuidelines.pdf. Last accessed July 20, 2015.

7 Cox C, Oeffinger K, Montgomery M, Hudson MM, Mertens A, Whitton J. Determinants of mammography screening participation in adult childhood cancer survivors: results from the childhood cancer survivor study. *Oncol Nurs Forum*. 2009;36(3):335-344.

8 Smith RA, D'Orsi C, Newell MS. Screening for breast cancer. In: Harris JR, Lippman ME, Morrow M, Osborne CK (eds). *Diseases of the Breast*. 4th ed. Philadelphia, PA: Lippincott, Williams & Wilkins; 2010: 87-115.

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