Breast Cancer Treatment Can Raise Heart Disease Risk

Weigh the benefits and risks of different types of therapy when considering treatment, the American Heart Association advises.

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Some medications frequently used to treat breast cancer can damage the heart and raise the risk of cardiovascular problems, sometimes long after treatment is completed, according to a new statement from the American Heart Association (AHA).

This does not mean that people with breast cancer should forgo treatment, but the organization recommends that they receive close monitoring and weigh the pros and cons of different types of therapy. The statement authors noted that the absolute risk of serious heart problems associated with breast cancer treatment is low.

Although there are nearly 48 million women estimated to be living with cardiovascular disease in the United States, compared with around 3 million breast cancer survivors, many people regard breast cancer as a bigger threat to women’s health, according to an AHA press release issued on February 1.

Breast cancer survivors—especially women over 65—are more likely to die from cardiovascular disease than from breast cancer, underscoring the importance of managing heart disease risk factors during and after cancer treatment.

“Any patient who is going to undergo breast cancer treatment, whether they have heart disease at the beginning or not, should be aware of the potential effects of the treatments on their heart,” said Laxmi Mehta, MD, director of the Women’s Cardiovascular Health Program at Ohio State University and chair of the statement writing group. “This should not deter or scare patients from undergoing breast cancer treatment but should allow them to make informed decisions with their doctor on the best cancer treatment for them.”

The scientific statement, published in the AHA journal Circulation, presents an overview of what we currently know about risk factors for both heart disease and breast cancer, the potential for heart damage associated with some breast cancer treatments, and strategies to prevent or minimize heart damage.
The commonly used chemotherapy drug doxorubicin and other drugs in its class (anthracyclines) can cause cardiomyopathy, or damage to heart muscle cells. Older people and those with prior heart problems are at greater risk, and the risk rises with the cumulative number of doses. Studies show that administering doxorubicin more slowly may lower the risk of heart failure. Giving it with another drug, dexrazoxane, may help protect the heart in women who require higher doses.

Taxanes, another class of chemotherapy drugs that includes Taxol (paclitaxel), can cause heart rhythm abnormalities. A newer type of therapy, cyclin-dependent kinase 4/6 inhibitors such as Ibrance (palbociclib) and Kisqali (ribociclib), can cause an abnormality known as QT interval prolongation.

Some targeted therapies that block HER2 (human epidermal growth factor receptor 2), such as Herceptin (trastuzumab), can weaken the heart muscle and cause heart failure. Sometimes the reduction in heart function is temporary and stopping treatment or adding heart medications can improve it, but in other cases heart damage can be permanent. The early development of heart failure can be a warning signal to slow down treatment or switch to another type of therapy, according to the statement.

Hormone therapies that block estrogen, such as tamoxifen, can raise the risk of blood clots and atherosclerosis. Radiation therapy, too, can raise the risk of heart problems, including development of coronary artery disease.

Otis Brawley, MD, chief medical officer of the American Cancer Society, told The Washington Post that breast cancer survivors may develop symptoms of congestive heart failure, such as swollen ankles and shortness of breath, years after chemotherapy. Emergency room staff and primary care providers who do not specialize in cancer may suspect a pulmonary embolism or heart attack, overlooking the potential contribution of breast cancer drugs. This is important because heart failure caused by chemotherapy is treated differently than failure due to other causes, Brawley said.

Deanna Attai, MD, of the University of California at Los Angeles, expressed concern that the AHA statement could discourage women with high-risk breast cancer from getting the treatment they need, telling The Washington Post that oncologists already closely monitor patients using HER2 blockers and other drugs with cardiac toxicity. She also noted that doctors now routinely test breast tumors and that people at low risk for disease progression may not need toxic chemotherapy.

When developing a breast cancer treatment plan, it is important to consider risk factors including age, smoking and history of heart disease. Health care providers should monitor heart health before, during and after breast cancer treatment. Lifestyle changes, including a healthy diet, exercise, maintaining a healthy weight and smoking cessation can help reduce cardiovascular risk—and could potentially also lower the likelihood of breast cancer progression or recurrence.

“Ideal breast cancer outcomes are reliant on coexisting cardiovascular health along the entire journey of breast cancer treatment,” the AHA statement authors concluded. “During breast cancer
treatment, surveillance, prevention and secondary management of cardiotoxicity are crucial; thereafter, long-term posttreatment monitoring for late cardiotoxicity and even non-treatment-related development of cardiovascular disease is essential.”

Click here to read the full statement in Circulation.

Click here to read the AHA press release about the statement.

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https://www.cancerhealth.com/article/breast-cancer-treatment-can-raise-heart-disease-risk