

# Close to the Heart



**T**hey say that the heart sees what is invisible to the eye. For cancer survivors, the connection between your cardiovascular system and your overall health is at the heart of the matter.

Cardiovascular disease and cancer are the two most common causes of death worldwide. Together, they

constitute nearly half of all deaths in the U.S. Fortunately, advances in treatments have increased cancer survival rates greatly over the years. However, some cancer treatment methods, including those for breast cancer, may cause lasting damage to your heart, especially if you're at risk for cardiovascular disease.

According to the American Heart Association, about 12 percent of breast cancer patients over the age of 65 develop heart problems within three years as a result of their cancer treatments.

### Cardio-oncology

Cardio-oncology is a field of study that is dedicated to the link between cancer treatments, such as chemotherapy or radiation, and cardiovascular disease. The goal of cardio-oncology is to help treat cancer patients without increasing their risk of cardiovascular disease.

### Signs and prevention

It's important that patients visit their healthcare providers to have their blood pressure and cholesterol levels monitored. Breast cancer patients should refrain from smoking to reduce their risk of cardiovascular disease, as well as stay healthy through exercise and diet. Patients with other cancers should also be aware of heart symptoms if they receive chemo or targeted therapy drugs.

Radiation is still an important part of treatment for breast cancer, in that it helps to lower the chances that the cancer will return. Women should still take these risks into account when discussing treatment options with their doctor. This is especially important in women who have known risk factors for heart disease.

### Treatment impact on heart muscles

In the 1970s, it was found that radiotherapy for breast cancer was linked to an increased risk of cardiovascular disease. The risk today is now much less.

Breast cancer patients treated with either chemotherapy drugs (anthracyclines) or targeted therapy drugs (trastuzumab) and then developed heart problems were more likely to get the problem under control by being treated with standard medication from a cardiologist. Chemotherapy frequently can cause thrombocytopenia (a medical term for low blood count), which can cause difficulty in managing conditions such as acute coronary syndrome, atrial fibrillation and stroke, and for people with prosthetic valves.

Although there is a risk, researchers suggest the chance of developing cardiovascular disease solely from radiation therapy is so small that women should not opt out of therapy to reduce their chances.

During radiation, the rate of major heart events was found to increase slightly with each unit of radiation used in patients. These major heart events include heart attack, the need to unblock or replace blood vessels to the heart or death from a reduced blood supply to the heart (ischemic heart disease).

Only one-third of breast cancer patients who developed heart failure within three years of treatment visited a cardiologist within 90 days of developing heart problems. Those who saw a cardiologist were more likely to receive a drug for heart failure. Periodic heart monitoring may be necessary for your doctor to detect any symptoms.

How does a patient know if she's affected? Patients should be sure to:

- Keep up with getting their blood pressure and cholesterol levels checked
- Refrain from smoking to reduce their risk of cardiovascular disease
- Stay healthy through exercise and diet
- Be aware of heart symptoms if they receive chemo or targeted therapy drugs
- Report any significant problem, such as shortness of breath or chest pain, to their healthcare provider.

### What should survivors ask their doctor?

If you're a cancer patient, you should talk to your healthcare provider about your heart risk. It's important to ask your oncologist or radiation therapy team about the risks before beginning radiation therapy. Ask them about treatment sites on your body that could potentially harm your heart, and be sure to avoid them.