Radiation Therapy for DCIS Does Not Seem to Increase the Risk of Cardiovascular Disease

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A large study found that women who received radiation therapy to treat ductal carcinoma in situ of the breast (DCIS) had no increased risk of developing cardiovascular (heart) disease compared with the general population or patients with DCIS who only had surgery. Previous studies involving patients with breast and other cancers have shown that radiation therapy directed at areas near the heart can increase their long-term risk of developing cardiovascular disease, so these results may help women who are deciding on their treatment plan and may reassure DCIS survivors who received radiation therapy.

DCIS is a very early stage of breast cancer (stage 0). Currently, oncologists recommend surgery to remove DCIS so it does not become an invasive breast cancer and spread to other parts of the breast or body. In the past, many women with DCIS had a mastectomy (surgical removal of the entire breast), but now most patients have a lumpectomy (removal of the tumor and a small, cancer-free margin of tissue around the tumor). After a lumpectomy, women may also receive radiation therapy to get rid of any remaining cancer cells and reduce the risk of recurrence (cancer that comes back after treatment).

As part of this study, researchers collected information from 10,468 women in the Netherlands who had been diagnosed with DCIS before the age of 75. About 71% of these women had surgery as their only treatment (43% had a mastectomy and the rest had a lumpectomy), while 28% were treated with surgery and radiation therapy. After approximately 10 years, the researchers found there were no differences in cardiovascular disease risk between patients who received surgery and those who received surgery plus radiation therapy. In addition, DCIS survivors actually had a 30% lower risk of dying from cardiovascular disease compared with the general population of Dutch women. However, this lower risk could be the result of other factors, such as education level, socioeconomic status, or making healthier lifestyle choices after a DCIS diagnosis.

What this means for patients

?Doctors have been worried about the late effects of radiation therapy for breast cancer, particularly cardiovascular disease,? said lead study author Naomi B. Boekel, MSc, a PhD student at the Netherlands Cancer Institute in Amsterdam. ?Our findings suggest that standard radiation therapy for women with DCIS does not appear to increase the risk of developing cardiovascular disease later in life. However, studies with longer follow-up after breast radiation therapy are needed before definitive conclusions about cardiovascular disease risk can be drawn.?

Questions to Ask Your Doctor

- What type and stage of breast cancer do I have? What does this mean?
- What are my treatment options?
- What treatment plan do you recommend? Why?
- What are the risks and benefits of this treatment plan?

For More Information

Understanding Radiation Therapy [1]

Side Effects of Radiation Therapy [2]

Frequently Asked Questions About Radiation Therapy [3]

Long-Term Side Effects of Cancer Treatment [4]

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Guide to Breast Cancer [6]

Links:
[1] http://dev-cancernet.asco.org/node/24728
[2] http://dev-cancernet.asco.org/node/24677
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