



HEALTH

Long Radiation Treatments Called Unnecessary in Many Breast Cancer Cases

By GINA KOLATA DEC. 10, 2014



Radiation is used after women have lumpectomies because it reduces the odds that another cancer will arise in the breast, and it improves the chances of survival. Mark Kostich/Getty Images

Two-thirds of women who have lumpectomies for [breast cancer](#) are receiving radiation treatment that lasts nearly twice as long as necessary, a

[new study](#) reports.

The conventional, longer treatment lasts five to seven weeks. [But four rigorous studies](#) and [guidelines](#) from a leading radiology society conclude that three to four weeks of more intense radiation is just as effective.

Women overwhelmingly prefer the shorter course of radiation, [studies have found](#). It is also less expensive.

Even though [60 to 75 percent of women](#) with [breast cancer](#) have lumpectomies — a total of about 140,000 to 160,000 women — doctors and health insurers say relatively few are receiving the shorter treatment because it takes time to change ingrained medical practices, especially when a procedure has been used for decades and the new one offers no additional medical benefit. Its advantages are saving time for patients, and money for the health care system and insurers.

“If a physician is doing five to seven weeks of radiation for 25 years, particularly if the physician is not a specialist and not in an academic medical center, you will be a bit leery about going to something new,” said Dr. Bruce G. Haffty, a professor and chairman of the department of radiation oncology at the Rutgers Cancer Institute of New Jersey. “You are comfortable with the outcomes, patients are satisfied. Now you’ve got something that perhaps costs a bit less, but you wonder: Is it as effective?”

In the new study, published Wednesday in JAMA, The Journal of the American Medical Association, two University of Pennsylvania doctors, [Ezekiel J. Emanuel](#) and Justin E. Bekelman, and their colleagues analyzed data from 14 commercial insurance plans involving 15,643 women who had their breasts irradiated after lumpectomies.

Radiation is used after women have lumpectomies because it reduces the odds that another [cancer](#) will arise in the breast, and it improves the chances of survival.

The researchers considered two groups of women who had radiation therapy and asked how many had received the shorter course. One group closely matched women in the previous randomized studies that evaluated the conventional treatment versus the shorter one. These women were older than 50 and had early-stage cancers. Practice guidelines published in 2011 by the American Society for Radiation Oncology recommend the shorter radiation therapy for this group.

The other group differed from participants in the previous studies because they were younger, had had prior [chemotherapy](#) or had [cancer](#) cells in their lymph nodes, indicating a more advanced cancer. The practice guidelines neither endorse nor discourage the shorter therapy for these women.

Use of the shorter course of radiation increased in both groups of women from 2008 to 2013, but still only a minority received this treatment. In the group that should have received the shorter therapy under the guidelines, 10.6 percent received it in 2008 and 34.5 percent in 2013. In the group that received no recommendation for or against the shorter treatment, the percentage who used it rose from 8.1 percent to 21.2 percent over that time.

In Canada and Britain, the statistics were far different. At least two-thirds of women in both groups received the shorter therapy.

In the United States, total medical expenses for the shorter therapy in

women for whom it was endorsed were \$28,747. For comparable women receiving the longer course of treatment, the cost was \$31,641. For the second group of women — for whom the shorter therapy was neither endorsed nor discouraged — medical costs were \$64,723, compared with \$72,860 for conventional therapy. Health insurers pay for radiation in a piecemeal fashion, and the shorter course involves about 16 doses, compared with about 33 with the conventional therapy.

Dr. Harold J. Burstein, a medical oncologist at Dana-Farber Cancer Institute in Boston, said that when the initial results of a Canadian trial on the shorter therapy were published in 2002, “there was real ambivalence about changing practice based on one study.” Doctors wanted to see what would happen as the women were followed over a longer time, and they wanted to see the result confirmed.

The results of that study contradicted years of practice in the field, said Dr. Gary M. Freedman, a breast radiation oncologist at the University of Pennsylvania and an author of the new study. In the 1970s and 1980s, when equipment was much less sophisticated, radiation oncologists found that shorter and more intense therapy burned women’s skin and scarred their breasts, making them shrivel and shrink over the ensuing decade.

“I started my residency in 1993,” Dr. Freedman said. “That was drilled into us”: Shorter and more intense radiation therapy “was a bad idea and would have a bad cosmetic result.”

But with improved equipment and methodology, he said, the clinical trials found that cosmetic results were just as good with the shorter treatment. “They did not just publish that the cure rates were the same, but they published very in-depth cosmetic assessments, particularly the British, who took pictures that were graded by blinded observers,” he said.

“That’s when the tide started turning.”

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