Radiation after lumpectomy helps prevent need for mastectomy in early stage breast cancer
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Contrary to clinical recommendations, older women with early stage breast cancer may want to undergo radiation after lumpectomy to help ensure that they will not need a mastectomy in the future. That is the conclusion of a new study published early online in CANCER, a peer-reviewed journal of the American Cancer Society. The findings indicate that current thinking on the risks and benefits of radiation for early stage breast cancer in older women may be inaccurate.

National treatment guidelines state that older women with early stage breast cancer that has not spread to the lymph nodes and that is driven by estrogen in the body can be treated with lumpectomy and estrogen blockers without the need for radiation. Benjamin Smith, MD, of The University of Texas MD Anderson Cancer Center in Houston, and his colleagues evaluated information on 7,403 women aged 70 to 79 years who were treated with lumpectomy for such breast cancers between 1992 and 2002 and whose data were contained in the Surveillance, Epidemiology, and End Results-Medicare database, which links cancer registry information to a master file of Medicare enrollment. Approximately 88 percent of these women received radiation after their lumpectomy.

When the investigators looked to see what happened to these women after their breast cancer was treated, they found that within 10 years after treatment, 6.3 percent of women who did not get radiation eventually had their breast removed by mastectomy, compared with only 3.2 percent of women who received radiation. The reasons for mastectomy are not reported by this dataset, but the most likely reason for mastectomy in this patient group is recurrence of cancer in the breast. The researchers were also able to identify which women were more and less likely to benefit from radiation. Specifically, radiation did not seem to benefit women ages 75 to 79 years with non-high grade tumors (which contain cells that look only moderately abnormal under a microscope), suggesting that this group can probably skip radiation. Patients with high grade tumors (which contain very abnormal-looking cells), regardless of age, seemed to derive the most benefit from radiation.

"These data are important because they suggest that radiation is likely of some benefit to certain women where national guidelines say that radiation is not needed," said Dr. Smith. "Our data could be helpful to women when they decide whether or not to undergo radiation," he added.

More information: "Effectiveness of radiation for prevention of mastectomy in older breast cancer patients treated with conservative surgery," Jeffrey M. Albert, I-Wen Pan, Ya-Chen Tina Shih, Jing Jiang, Thomas A. Buchholz, Sharon H. Giordano, and Benjamin D. Smith. CANCER; Published Online: August 13, 2012 (DOI: 10.1002/cncr.27457).

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