Adding radiation decreases breast cancer recurrence

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Radiotherapy after breast conserving surgery for breast cancer reduces recurrence and prevents development of additional breast tumors in older women with early stage breast disease, according to a new study. Published in the March 1, 2007 issue of CANCER, a peer-reviewed journal of the American Cancer Society, the study suggests that women also benefit from the recommended five years of tamoxifen treatment for hormone responsive tumors. Among women over 65 and treated with breast conserving surgery, the risk of local or regional recurrence increased up to 3.5 times if they did not receive radiation after their surgery.

Great strides have been made in breast cancer treatment. Breast conserving surgery in combination with radiotherapy and mastectomy provide women with two good options for their initial treatment. Augmenting surgery with hormone modulating drugs, such as tamoxifen, further improves survival and reduces recurrence.

Women over 65 are at the highest risk for breast cancer and make up half of those diagnosed. However, they are less likely to receive standard therapy, particularly radiotherapy after breast conserving surgery, than younger women. Making treatment recommendations for older patients, who may have more comorbidities than younger patients, is complicated by under-representation of older women in clinical trials and prognostic studies.

Led by Ann M. Geiger, M.P.H., Ph.D., of Wake Forest University

School of Medicine and formerly of Kaiser Permanente Southern California, researchers retrospectively followed 1,837 women over 65 for ten years who were treated with surgery for early stage breast cancer to examine the impact of treatment on the occurrence of recurrent and additional breast tumors for this patient population. This analysis was part of a larger study led by Rebecca Silliman, M.D., Ph.D., of the Boston University Medical Center. It was conducted under the auspices of the National Cancer Institute-funded Cancer Research Network.

They found that women, regardless of age or comorbidities, who underwent breast conserving surgery but no radiotherapy, were more likely to have recurrence of disease or develop additional breast tumors compared to women who received breast conserving surgery and radiation or mastectomy alone. The risk was highest for local and regional recurrence. These results held regardless of tamoxifen treatment, suggesting that adjuvant radiation treatment was highly effective.

In addition, the researchers found that women who received less than one year of tamoxifen were more likely to have disease recurrence or develop additional breast tumors compared to women who completed the recommended five year course.

Based on these study findings, the authors "recommend that mastectomy or breast conserving surgery with radiation therapy, along with adequate duration of adjuvant hormonal therapy for hormone-responsive tumors, be considered standard therapy in women of all ages and comorbidities, excepting those with very limited life expectancies."

Source: John Wiley & Sons, Inc.