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Re: Cancer Outcomes in DCIS Patients Without Locoregional Treatment

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We read with interest the recent article by Ryser et al. (1) on cancer outcomes among women diagnosed with ductal carcinoma in situ (DCIS) from 1992 to 2014 and classified as not receiving definitive surgery or radiotherapy in the Surveillance, Epidemiology and End Results (SEER) registry. They followed 1286 women for a median of 5.5 years and reported a surprisingly low 10-year cumulative ipsilateral invasive breast cancer (iIBC) risk of 10.5% (95% confidence interval [CI] = 8.5% to 12.4%).

To contrast, the National Surgical Adjuvant Breast and Bowel Project B-17 clinical trial compared iIBC rates in 817 women with DCIS who received lumpectomy (achieving clear surgical margins) alone vs lumpectomy with radiotherapy and reported 10-year cumulative incidence rates of 16.4% (95% CI = 13.7% to 19.1%) and 5.5% (95% CI = 3.4% to 7.6%), respectively (2). Another recent study of DCIS followed up 89 women diagnosed on needle biopsy with no surgical resection for at least 1 year and reported that 33% developed iIBC after a median interval of 45 months (3). Thus, the iIBC rate for untreated DCIS in SEER (1) is more than one-third lower than the rate reported for women in the B-17 trial whose tumors had been completely excised (2) and more than two-thirds lower than a recent study of unresected DCIS (3).

We believe the iIBC rates of Ryser et al. (1) for untreated DCIS were artificially low because of at least two issues not mentioned in their article. Although current SEER coding rules state that all iIBC occurring more than 60 days after DCIS be recorded as a new (or multiple) primary, coding rules before 2007 instructed registrars to classify cases as a "recurrence" any time the word "recurrence" was mentioned in the physician's or consultant's notes, history, or summary (4). Many subsequent ipsilateral cancers after DCIS have been and continue to be called recurrences by clinicians. Pre-2007, these "recurrences" were not to be abstracted as a subsequent primary cancer. Thus, the current multiple primary rule did not pertain to a substantial proportion of patients in Ryser et al. (1).

In a study of DCIS patients diagnosed (1990–2001) and treated with breast-conserving surgery at Kaiser Permanente (5), we found 35% of iIBC identified from comprehensive chart review up through 2004 were not recorded in the cancer registry (Habel, unpublished data), which reports to SEER and follows the same standards and guidelines. We expect similar findings in other SEER registries.

Additionally, it is likely that some women classified in SEER as not receiving locoregional treatment (only 2% of DCIS patients) during the study period actually received surgery with or without radiotherapy. This could happen because of a simple coding error or because definitive therapy occurred outside the SEER region. It also could occasionally happen when the diagnosis was made by open biopsy that had disease-free margins and there was no further treatment.

In summary, we think SEER data before 2007, without additional information from medical records or patients, should not be used to estimate the incidence of iIBC after an initial DCIS. We also think authors of studies of untreated DCIS patients in SEER should consider using additional data sources to verify treatment.

Notes

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