Hospitals serving minority patients follow breast cancer recommendations at similar rate

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Among accredited U.S. cancer centers, hospitals serving primarily minority patients are as likely as other hospitals to offer the standard of surgical care for early-stage breast cancer, according to results presented at the virtual American College of Surgeons (ACS) Clinical Congress 2020.

"There are a lot of health disparities in cancer: in access to care, treatment, and outcomes," said senior study investigator T. Salewa Oseni, MD, FACS, assistant professor of surgery, Harvard Medical School, Boston. "In our study, we were pleasantly surprised there was no difference between the care that Black, Hispanic, and white women receive."

The researchers examined hospitals' axillary management practices involving removal of the lymph nodes from under the arm called the axilla. At the breast cancer operation, the surgeon performs a sentinel lymph node biopsy to remove and test the sentinel lymph node or nodes. These are the lymph nodes where the cancer most likely will spread first. In the past, if the results show cancer in the sentinel lymph nodes, called node positive, the surgeon removed most lymph nodes under the arm, Dr. Oseni said. However, this procedure, known as a completion axillary lymph node dissection (ALND), often results in lymphedema, which is a condition marked by swelling and sometimes pain in the arm, hand, or breast.

"Five to 10 years ago, studies found that not every woman needs to have an axillary dissection after a positive sentinel lymph node biopsy," Dr. Oseni said. "The combination of radiation and chemotherapy in certain instances may be sufficient, with the same survival and fewer clinical complications."

Recommendations from these study results are rapidly becoming the standard of care in breast cancer with up to two positive lymph nodes, said lead study investigator Olga Kantor, MD, MS, an associate surgeon at Brigham and Women's Hospital in Boston. When more than two sentinel lymph nodes are positive, the standard of care remains an ALND.

Racial-ethnic disparities

Dr. Kantor and her fellow researchers assessed whether disparities exist in the application of these recommendations based on patient race and ethnicity. They found that the care provided to Black, Hispanic, and white women was similar, indicating that hospitals are following the same guidelines for all patients.
evidence-based guidelines depending on whether a hospital serves predominantly minorities. The researchers defined minority-serving hospitals (MSH) as those in the top 10 percent treating the largest proportion of Black and Hispanic patients.

Many patients at MSH lack health insurance and have decreased access to high-quality care, such as cancer specialists, she said. Additionally, some studies have found lower adherence to cancer treatment guidelines among MSH.

Using data from the National Cancer Database, Dr. Kantor’s group included more than 21,000 breast cancer patients treated in 2015 and 2016. Cosponsored by the ACS and the American Cancer Society, this database includes information on more than 70 percent of newly diagnosed cancer cases in the U.S. The information comes from more than 1,500 cancer programs, all accredited by the ACS Commission on Cancer, and is the largest database of its kind.

The researchers studied whether the cancer centers omitted ALND in appropriately selected patients, which they called uptake of results from three landmark clinical trials. These studies were the ACS Oncology Group (ACOSOG) Z0011 trial published in 2011, the ACOSOG Z1071 trial in 2013, and the After Mapping of the Axilla: Radiotherapy or Surgery (AMAROS) trial by the European Organisation of Research and Treatment of Cancer in 2014.

The studies included patients with early-stage breast cancer and small tumors on examination or imaging (clinical T1 or cT2) who underwent breast conservation (lumpectomy) or, in the AMAROS trial, mastectomy.

There was no survival difference in patients with one or two positive sentinel lymph nodes between those who had ALND and those who did not in the ACOSOG Z0011 trial. Similarly, the AMAROS investigators found no survival difference between patients who had ALND and those who received axillary radiation therapy but no ALND. The Z1071 trial results showed it was possible to do sentinel lymph node biopsy alone after a response to preoperative (neoadjuvant) chemotherapy.

**Surprising results**

Dr. Kantor and her team divided patients into three groups by matching the cancer characteristics to the inclusion criteria for these clinical trials.

Among the 7,167 patients who met the criteria for the ACOSOG Z0011 trial, there was a similar uptake of the recommendation to omit ALND between MSH and non-MSH (74.6 percent versus 72.9 percent, respectively), Dr. Kantor reported. Likewise, uptake of the ACOSOG Z1071 results was similar among the 4,546 patients meeting study criteria: 41.9 percent for MSH and 44.9 percent for non-MSH.

In the 9,433 patients who matched criteria for the AMAROS trial, uptake was slightly lower at MSH—11.7 percent—compared with 14 percent at non-MSH, according to the study abstract. However, after the researchers adjusted their statistical analyses for multiple factors, they found no difference in uptake by MSH status, Dr. Kantor said.

"Minority-serving hospitals offer a strong level of evidence-based breast cancer care if accredited by the Commission on Cancer," Dr. Oseni concluded. However, they cannot generalize their study findings to hospitals lacking this accreditation.


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