

## High blood pressure linked to earlier death among African-American breast cancer patients

March 4 2009

---

A study by researchers at the University of California, San Francisco has shown that hypertension, or high blood pressure, is a predictor of mortality among breast cancer patients, especially those who are African-American, and that hypertension accounts for approximately 30 percent of the survival disparity between African-American and white breast cancer patients.

According to the study's lead author, UCSF epidemiologist Dejana Braithwaite, PhD, of the UCSF Helen Diller Family Comprehensive Cancer Center, who also is an affiliate with the UCSF National Center of Excellence in Women's Health, this is the first study to link cancer mortality with hypertension, and specifically the first to show that hypertension is a predictor of mortality among African-American breast cancer patients.

"White women are more likely to get breast cancer, but African-American women are more likely to die from it," said Braithwaite. "We were trying to shed light on the factors that contribute to disparities in survival between the two groups."

The results are published in the March 2009 print edition of the *International Journal of Cancer* and appear online at <http://www3.interscience.wiley.com/cgi-bin/fulltext/121431839/HTMLSTART>.

The study included 416 African-American and 838 white women diagnosed with breast cancer between 1973 and 1986, following them through 1999. All of the women in the study were patients at Kaiser Permanente in Northern California. The patients were all residents of the San Francisco Bay Area and had a known stage of disease and course of cancer treatment.

Kaiser Permanente members are representative of the general population for many ethnic, demographic and socioeconomic categories, except for the very high and very low ends of the economic spectrum, according to the study. The researchers used data from patient records, which they considered more reliable than data self-reported by patients. Kaiser Permanente's division of research has long collaborated with UCSF on breast cancer research.

The study found that African-American breast cancer patients had a higher overall crude mortality, or death from all causes, than whites during the study period: 39.7 percent versus 33.3 percent respectively over a mean follow-up of nine years.

When age, race, tumor characteristics, and breast cancer treatment were controlled, hypertension accounted for 30 percent of the racial disparity in mortality, study findings showed.

"High blood pressure led to poorer outcomes for African-American patients than for their white counterparts," said Braithwaite. "Even if you statistically control for tumor characteristics and breast cancer treatments—chemotherapy, surgery, radiation, and hormone treatment—the adverse effect of hypertension in African-American women means a greater likelihood of death."

Hypertension is not part of the Charlson Comorbidity Index, a widely-used generic tool that provides survival estimates for patients using a

range of co-existing conditions or so-called comorbidities. If the results of this study are validated in more contemporary patient populations, the research suggests that hypertension should be included in this Index because of its high predictive value for outcomes, said Braithwaite.

According to study senior author Laura Esserman, MD, director, Carol Franc Buck Breast Care Center; co-leader, Breast Oncology Program, UCSF Helen Diller Family Comprehensive Cancer Center; and part of the UCSF National Center of Excellence in Women's Health, comorbidities have a huge influence on life expectancy and therefore influence treatment decisions for breast cancer. "We started out by trying to determine which comorbidities should be assessed for all patients routinely, and discovered that hypertension in African-Americans is associated with higher mortality from breast cancer," she said.

In addition, this information may provide clues to the cause of higher mortality in African American women with breast cancer, Esserman said.

"The message is that hypertension is a big deal. It affects African-Americans more than other ethnic groups, and it affects their survival overall. Better management of hypertension has potential to improve patient outcomes, particularly among African-American breast cancer patients," Braithwaite concluded.

Source: University of California - San Francisco

Citation: High blood pressure linked to earlier death among African-American breast cancer patients (2009, March 4) retrieved 25 April 2024 from <https://medicalxpress.com/news/2009-03-high-blood-pressure-linked-earlier.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.