Non-Caucasians at Higher Risk for Severe Metastatic Breast Cancer Pain

Atlanta 2007/11/26 - A new study finds significant racial differences in the risk of pain related to metastatic breast cancer. An analysis by Dr. Liana Castel of the University of North Carolina at Chapel Hill and colleagues found that non-whites experience poorer pain control among women with this disease. The study is published in the January 1, 2008 issue of CANCER, a peer-reviewed journal of the American Cancer Society.

Studies indicate that chronic or recurrent pain affects 30 percent of all cancer patients and 60 to 90 percent of patients with advanced cancer. Age, race, tumor type, genetics, psychosocial context, and culture can all affect pain. However, it is unclear how pain is influenced by changes over the course of disease due to factors including radiation, surgery, and chemotherapy. The current study was among the first to examine whether race plays a role in patients’ experiences in pain over the course of metastatic cancer.

Dr. Castel and co-investigators studied 1,124 women with metastatic breast cancer and bone metastases who received standard treatment in an international chemotherapy clinical trial conducted from October 1998 to January 2001. The study comprised women in 19 countries; the majority (82%) of non-whites were from the US. A test called the Brief Pain Inventory—which is based on a scale of zero to ten in pain severity—was administered repeatedly over a year to determine pain levels. The authors found that non-white women reached a pain level of seven or higher on the Brief Pain Inventory scale significantly earlier during a year of follow-up, compared with white women. A score of 7 or higher on the scale commonly designates severe (vs. moderate or mild) pain. Besides race, other predictors for greater pain were inactive performance status and preceding radiation treatment.

Dr. Castel and her co-authors note that their findings confirm published evidence that non-Caucasians are at highest risk for undertreatment of pain, including inadequate dosing and poor access to medication. Racial/ethnic minority patients have also been shown to be at greater risk for breast cancer mortality. The authors conclude that research should seek to uncover and resolve the reasons for these racial disparities. In addition, "clinicians should use information about known risk factors to inform more aggressive and earlier intervention among non-Caucasian women with metastatic breast cancer," say the authors.

This work was supported by AHRQ National Research Service Award Research Training Grant T32 HS000032-17. The authors also gratefully acknowledge Novartis Pharma for granting permission to conduct these analyses.

Article: "Racial Difference in Pain During 1 Year Among Women With Metastatic Breast Cancer: A Hazards Analysis of Interval-Censored Data," Liana D. Castel, Benjamin R. Saville, Venita DePuy, Paul A. Godley, Katherine E. Hartmann, and Amy P. Abernethy, CANCER; Published Online: November 26, 2007 (DOI: 10.1002/cncr. 23133); Print Issue Date: January 1, 2008.

David Sampson
Director, Medical & Scientific Communications
American Cancer Society
(213) 368-8523
david.sampson@cancer.org