

Minority Women More Likely to Experience Severe Pain Related to Metastatic Breast Cancer

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November 28, 2007 — Nonwhite women with metastatic breast cancer are more likely than white women to suffer severe pain associated with their disease, according to a report in the November 26 online issue of *Cancer*. Even though all the women who participated in the prospective multicenter randomized controlled trial received standard analgesic treatment, nonwhite race was predictive of poorer pain control.

The authors note that adequate analgesia is partially dependent on accurate reporting by the patient, but that patients might be reluctant to report their pain. Social, cultural, and religious issues can interfere with the reporting of pain by minority patients. The authors also point out that oncologists bear the responsibility for providing adequate analgesia and effective pain management over time in minority women with metastatic breast cancer, and that the medical profession in general has an obligation to determine the scope of cancer pain treatment disparities and to devise remedies that address it.

"Our main point is that clinicians should pay attention to risk factors for worsening pain over time when making decisions about pain management in women with breast cancer that has spread to bone," said lead author Liana D. Castel, PhD, from the Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

Their study did not address the specific reasons for racial differences in pain management, Dr. Castel told *Medscape Oncology*, but she pointed to a report from the Institute of Medicine called "Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care," which discusses evidence of possible sources of disparities at system, provider, and patient levels.

"The report led me to believe that the problem of disparities in cancer pain comes from a combination of factors on all 3 of these levels," she said.

Previous studies have noted that factors such as age, race, tumor type, genetics, psychosocial context, and culture have all been found to affect pain and analgesic efficacy. Younger patients with breast cancer also appear to be at a higher risk for posttreatment pain. Previous research has also shown racial disparities in patients with different types of cancer.

In 1 multicenter study that involved patients with a variety of cancers, including breast, gynecologic system, genitourinary tract, lymph nodes, and lung, the researchers found that patients seen at centers that predominantly treat minorities were 3 times more likely than those treated elsewhere to have inadequate pain management, Dr. Castel explained.

Dr. Castel referred to another study, conducted in 2000, that looked at pain in 108 minority patients with different types of cancer and surveyed nurses and physicians. It showed that physicians underestimated pain in 74% of black patients and 64% of Hispanic ones and were more likely to underestimate the pain severity of female patients than male patients.

"I believe that pain control does fit the paradigm of racial disparities that have been seen in healthcare in general," she said.

On the basis of this existing evidence, Dr. Castel and colleagues hypothesized that, compared with white women, minority patients have higher hazards of pain severity and pain interference in daily activities.

In a cohort of 1124 women with metastatic breast cancer and bone metastases, the Brief Pain Inventory (BPI) was administered repeatedly during a 1-year period. The authors defined the outcome as the time to first reach a pain score of 7 or above on the BPI (0–10) pain severity or interference scales.

They found that racial differences were statistically significant for pain severity and pain interference. Nonwhite race presented the greatest hazard for first reaching a BPI severity score of 7 or greater. The same results were seen for the pain interference model; nonwhite race presented the greatest hazard for reaching an interference score of 7 or above.

"In order of magnitude, the 2 biggest factors we found to be associated with risk of pain severity were radiation therapy in the preceding 80 days and non-Caucasian race," Dr. Castel told *Medscape Oncology*. "For pain interference with daily living, race was among the 4 biggest factors found to be associated with pain risks."

Inactive performance status, radiation therapy in the preceding 80 days, and hospital admission in the preceding 80 days were the most hazardous time-dependent variables for pain interference.

The authors emphasized that future research should explicitly collect and model the longitudinal effects of factors explored in this study, along with other psychological, sociocultural, healthcare-level, and clinical characteristics that are currently known to affect pain.

"Clinicians should use information about known risk factors to inform more aggressive and earlier intervention among non-Caucasian women with metastatic breast cancer," concluded the authors, because minority women are at risk for more pain and greater worsening of pain over the course of this disease.

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