Improvements needed in genomic test result discussions

March 8 2010

A new study has found that one in three early-stage breast cancer patients who received genomic testing when deciding about treatment options felt they did not fully understand their discussions with physicians about their test results and their risk of recurrence. About one in four experienced distress when receiving their test results.

Published early online in CANCER, a peer-reviewed journal of the American Cancer Society, the findings suggest there is room for improvement in communicating cancer recurrence risks and treatment decisions with patients.

Genomic testing is an increasingly important part of care for patients after they are diagnosed with early stage breast cancer. The test, which looks at 21 genes in breast tumors removed during surgery, can indicate the chance the patient's cancer will recur. Such information can help guide decisions by physicians and patients about chemotherapy treatments. Patients with a high risk of recurrence may opt for more aggressive treatment, while those with lower risk may safely avoid over-treatment and its potential side effects. It can be challenging, however, for physicians to determine the best way to talk to patients about their test results and to use the results to make important treatment decisions with patients. Currently, there is little consensus regarding the most effective method to communicate risk information to patients.

Noel Brewer, PhD, assistant professor of health behavior and health education at University of North Carolina's Gillings School of Global

Public Health, and Janice Tzeng, MPH, who worked on this study as a graduate student at the school, led a team that examined how women with breast cancer received and understood cancer recurrence risk information after receiving a genomic diagnostic test called Oncotype DX, that is gaining widespread acceptance by oncologists and insurers.

To find out more about women's reactions, investigators mailed surveys to 77 women with early-stage, estrogen receptor-positive breast cancer who received Oncotype DX between 2004 and 2009. The study was funded by a five-year grant from the American Cancer Society.

"Almost all women agreed that having the test gave them a better understanding of their treatment options' chances of success," said Brewer. "Most women said that they would have the test if they had to decide again today, and that they would recommend the test to other women in their same situation," he added. Also, most women accurately recalled their genomic-based recurrence risk results, he said. These findings suggest that patients have a positive attitude about genomic testing, and testing helps them better understand their treatment options.

While many women understood discussions about their genomic test results, a third reported not fully understanding these discussions. Although 87 percent of women received a low or intermediate breast cancer recurrence risk score, about a quarter of the women experienced distress when receiving their test results. The authors concluded that their findings suggest a need to improve risk communication and treatment decision making after patients undergo genomic testing.

More information: "Women's experiences with genomic testing for breast cancer recurrence risk." Janice P. Tzeng, Deborah Mayer, Alice R. Richman, Isaac Lipkus, Paul K. Han, Carmina G. Valle, Lisa A. Carey, and Noel T. Brewer. CANCER; Published Online: March 8, 2010. DOI: 10.1002/cncr.24990

Provided by American Cancer Society