

Researchers identify risk factors for contralateral breast cancer

January 26 2009

A preventive procedure to remove the unaffected breast in breast cancer patients with disease in one breast may only be necessary in patients who have high-risk features as assessed by examining the patient's medical history and pathology of the breast cancer, according to researchers at The University of Texas M. D. Anderson Cancer Center.

Their findings, published in the March 1, 2009 issue of *Cancer*, may help physicians predict the likelihood of patients developing breast cancer in the opposite breast (contralateral breast cancer), stratify risk and counsel patients on their treatment options.

"Women often consider contralateral prophylactic mastectomy (CPM) not because of medical recommendation, but because they fear having their breast cancer return," said Kelly Hunt, M.D., professor in the Department of Surgical Oncology at M. D. Anderson and lead author on the study. "Currently it is very difficult to identify which patients are at enough risk to benefit from this aggressive and irreversible procedure. Our goal was to determine what characteristics defined these high-risk patients to better inform future decisions regarding CPM."

According to the researchers, approximately 2.7 percent of women diagnosed with breast cancer choose to have CPM. Recent statistics have shown that the rate of CPM in women with stage I-III breast cancer increased by 150 percent from 1998 to 2003 in the United States. Potential reasons breast cancer patients choose to undergo CPM include risk reduction, difficult surveillance and reconstructive issues such as

symmetry and/or balance.

To begin to classify such risk factors, researchers reviewed the cases of 542 women with breast cancer only in one breast who received CPM to remove the second breast at M. D. Anderson from January 2000 to April 2007. Out of this group, 435 patients had no abnormal pathology identified in the opposite breast, 25 patients had contralateral breast cancer identified at surgery, and 82 patients had abnormal cells (atypical ductal hyperplasia, atypical lobular hyperplasia and lobular carcinoma in situ) that indicate a moderate to high-risk for breast cancer development in the contralateral breast found at the time of surgery.

Further analysis of the patients with contralateral breast cancer revealed that a five-year Gail risk of 1.67 percent or greater; an invasive lobular histology; and multiple tumors in the original breast were all strong predictors for contralateral breast cancer. Patient race, estrogen receptor status and progesterone receptor status were not associated with increased risk.

"We went from having very little information on the benefit of this procedure for individual patients to identifying three independent and significant risk factors," Hunt said. "Each provides valuable insight into how likely a woman is to develop the disease in her other breast and enables physicians to make an educated recommendation if a patient will potentially benefit from CPM."

The Gail model, typically used for patients without breast cancer, evaluates factors such as age, age at menarche, number and findings of previous breast biopsies, age at first live birth and number of first-degree relatives with breast cancer, has been validated in several studies to calculate the risk of developing an invasive breast cancer over the next five years. The five-year risk of 1.67 percent is traditionally used as the cutoff point for the definition of "high risk."

"We've always known contralateral breast cancer risk is not the same for all women and it is unnecessary to perform preventive mastectomies routinely. As we begin to clarify the specific risk factors, the number of women undergoing CPM may decrease and those with a low to moderate-risk may be more open to less extreme options for risk reduction, such as hormonal therapy and newer agents for prevention of breast cancer."

Source: University of Texas M. D. Anderson Cancer Center

Citation: Researchers identify risk factors for contralateral breast cancer (2009, January 26)
retrieved 18 April 2024 from

<https://medicalxpress.com/news/2009-01-factors-contralateral-breast-cancer.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.