Counseling with genetic cancer screening may increase knowledge and decrease anxiety

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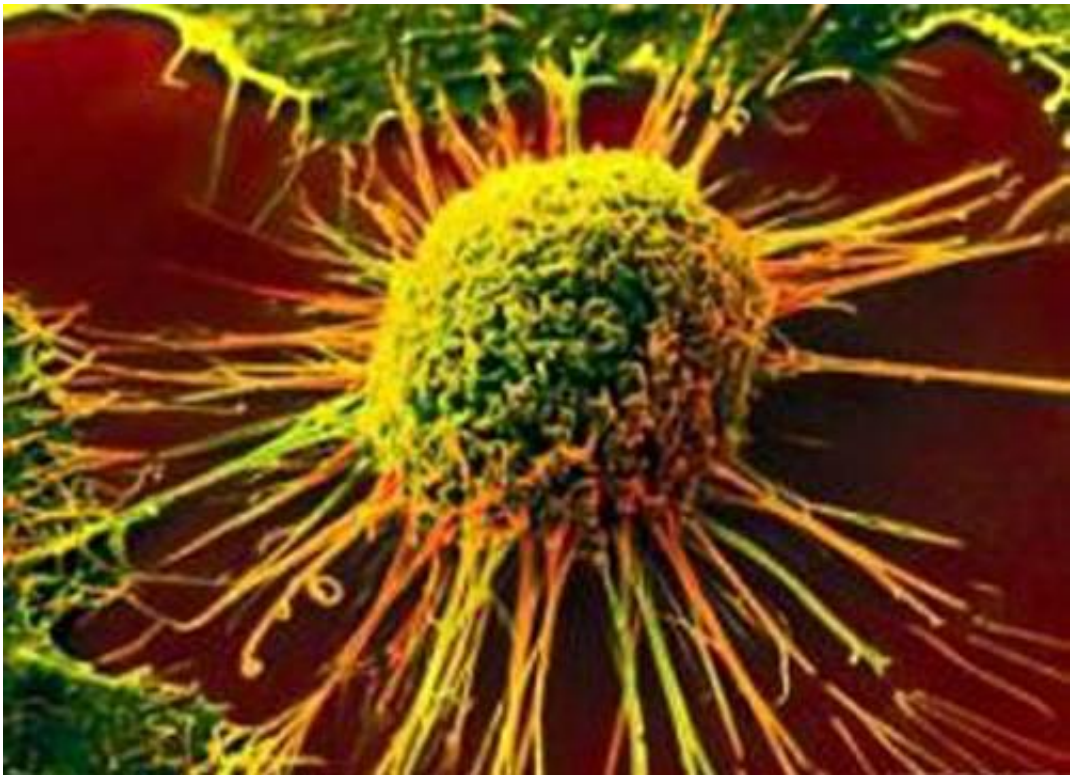

Many BRCA 1/2-negative patients choose to proceed with comprehensive testing for genetic mutations that increase cancer risk, and when presented with counseling before and after testing, most make informed decisions and experience decreased levels of anxiety, according to new research from the Perelman School of Medicine at the

University of Pennsylvania and the Basser Center for BRCA in Penn's Abramson Cancer Center. The study will be presented on Thursday, December 10, as part of the 2015 San Antonio Breast Cancer Symposium (Abstract #P2-09-01).

"Although comprehensive genetic testing is becoming more widely available, the potential benefits and risks for patients are unknown," said lead author Angela R. Bradbury, MD, an assistant professor of Hematology/Oncology in Penn's Abramson Cancer Center. "The new study shows that when providing patients with counseling both before and after testing, most report an increase in knowledge, and decreases in anxiety and uncertainty after learning the test results."

To date, 124 women with a personal or family history of breast or ovarian cancer who have tested negative for the cancer causing BRCA1 and BRCA2 genes have participated in the study. Of the 95 who have completed pre-test counseling with a certified genetic counselor, 93 percent elected to move forward with multiplex testing, which allows for the simultaneous analysis of alterations in 25 cancer-related genes, and is an alternative to targeted tests that screen for individual forms of cancer. A targeted test might look only for inherited mutations in the BRCA1 and BRCA2 genes, for example.

After testing, patients experienced declines in in general anxiety, and an improvements in genetic knowledge. However, patient experiences may vary by test result with the potential for short-term increases in anxiety and sustained uncertainty for those who test positive, which the authors suggest may be a result of the limited amount of information available for some of the mutations.

"There's much we don't know about some of the genes these panel tests examine," said Susan M. Domchek, MD, executive director of the Basser Center for BRCA and senior author on the study. "While it can

be reassuring to hear that you don't have these mutations, we may not have a lot of information or effective treatment plans for some patients with a mutation in a cancer susceptibility gene. "In those cases, patients are sometimes left with little choice but to wait until additional research helps guide management for their situations."

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