Health MATTERS

Best Doctors®

BREAST CANCER AND BRCA GENE TESTING

A BRCA gene test is a blood test to check for specific changes in genes that help control normal cell growth. When functioning normally, these genes (which are called BRCA1 and BRCA2) do not pose any risk to a woman's health. However, when mutations are found in these genes, it indicates an increased risk for developing breast cancer or ovarian cancer.

Researchers are uncertain what causes changes in these genes to occur. But the rates of women who have BRCA mutations show a greater likelihood for developing breast cancer than those for women who do not have the mutations. For example, a 30-year-old woman with a BRCA mutation has a 1 in 3 chance of developing breast cancer during her lifetime, compared with a 1 in 8 chance for women without these genetic mutations. Over a lifetime, women with BRCA mutations have a 50 to 85 percent chance of developing breast cancer.

Men with these gene mutations also have an increased risk of breast cancer. And both men and women with these mutations may also be at an increased risk for other cancers. The gene changes can be inherited from either the mother's or father's side of the family.

A BRCA gene test does not test for cancer itself. It tests for an increased risk of developing breast or ovarian cancer, and in some cases for those already diagnosed with cancer, it assists in treatment decisions. This test is only conducted with patients who have a long family history of breast cancer or ovarian cancer, and sometimes for those who already have one of these diseases.

Who should consider BRCA testing:

- Have had a breast cancer diagnosis before age 50
- Have had breast cancer in both breasts
- Have had breast cancer and ovarian cancer
- Have one or more male family members who have had breast cancer
- Have multiple cases of breast cancer in the family
- Have at least one family member who has had BRCA-related cancer
- Are an Ashkenazi Jew (a Jewish person whose ancestors came from Eastern Europe)

If you don't meet any of these criteria, you are unlikely to have a BRCA1 or BRCA2 gene change. Statistics for BRCA gene change in adult women show a miniscule occurrence of only 2 or 3 per 1,000 women.

Genetic testing for the BRCA genes gives people the chance to learn if their family history of breast cancer is due to an inherited gene mutation. However, most women who get breast cancer do not have an inherited gene mutation. Only 5 to 10 percent of breast cancers in the U.S. are linked to an inherited gene mutation.

If you are concerned about your family history for cancer, talk to your physician about the BRCA test, and whether it is necessary for you. Counseling from your qualified health care provider is the best first step to learn more about the indications, benefits, and potential risks and limitations associated with the test.

If you have questions about a diagnosis, or are facing a medical decision, contact Best Doctors.

Call 866.904.0910 or visit members.bestdoctors.com