

Breast Cancer Vigilance and the BRCA 1 & 2 story

This article is in tribute to October as breast cancer awareness month and is dedicated to the 182,000 women and 2000 men newly diagnosed with breast cancer and to the 40,000 who will die from it just this year.

We are all aware of the statistics – 1 of every 8 women will get breast cancer - a number that guarantees that we all know of or have been victims. Breast cancer is the second leading cause of cancer death in women.

Fortunately, 8 of every 10 breast lumps are benign. Breast cancer in women under age 30 is very rare, with 75% of cases occurring in women over 50 years old. The 5-year overall survival rate for **localized** disease has risen to 98% due to better public awareness, early detection through screening, and improved treatment options.

Risk factors for breast cancer include:

- having a mother, sister, or daughter who had breast cancer before age 50
- having a male relative at any age with breast cancer
- if onset of menstruation occurred before age 12 and/or menopause occurs after age 55
- never having children or having delivered a baby after age 30
- having a certain ethnic background such as Ashkenazi Jewish ancestry
- having a close relative with a known BRCA 1 or BRCA 2 gene mutation (see below)

Some preventative measures include maintaining a healthy weight, exercising, limiting alcohol intake, and stopping smoking. Aside from the clinical breast exam performed by the doctor every one to three years and monthly breast self-exams, there are also mammograms (standard X-ray or digital), ultrasounds, and MRIs that can provide early detection. Women should start getting annual or biennial screening mammograms by age 40 or earlier if strong risk factors exist.

If a breast or armpit lump detected, with or without overlying skin dimpling, clear or bloody nipple discharge and scale, or skin contour and color changes, see your doctor immediately for evaluation. Your physician may recommend a diagnostic imaging test with a biopsy. Treatment options include surgery, radiation, hormone- and chemotherapy according to the stage of the disease. Some women with very high risk for developing breast cancer opt for prophylactic removal of both breasts and/or ovaries before any possible tumor arises.

Five to 10% of all breast cancers are hereditary. The BRCA 1 & 2 genes (BRCA1 & 2) are ordinarily tumor suppressor genes meant to fight off cancer development, particularly for breast but also for ovarian, prostate, colon, and other tissues. If a woman tests positive for a mutated BRCA1 or 2 gene, her risk for developing breast cancer rises to 80%.

Some high-risk women (and men) can request getting tested for the BRCA 1 and BRCA 2 mutations. While those with a negative test feel relief, those with positive results showing the abnormal gene(s) may find themselves in an emotional, medical, and ethical Pandora's Box. On one hand, they can get screening and subsequent early intervention if tumor is detected, but if the screening tests are negative, there is anxiety from the anticipation of possible future cancer. In addition, there may be genetic discrimination from employers and insurance companies that arise from having a positive result documented in the medical record. Thus, many people may confidentially seek to pay for the test out-of-pocket despite the potential high cost of this test.

Those interested in getting tested should first talk to their physicians and a genetics specialist, and then also research their insurance policies and state privacy and anti-discrimination laws. In Texas, the Genetic Information Non-discrimination Act of 2007 forbids employment and enrollment discrimination by employers and health insurances based on genetic testing.

For more information, go to: www.cancer.gov

For more information to find facilities offering free and low-cost mammograms if un- or under-insured, contact:

-the CDC at 1-800-CDC-INFO or via www.cdc.gov

-the American Cancer Society at 1-800-ACS-2345

-the Susan G. Komen Breast Cancer Foundation helpline at 1-877-GO-KOMEN

Roopal Bhatt, MD is a Dermatologist starting practice in the Four Points area. For questions or more information, please contact her at contact@fourpointsdermatology.com.