

Who gets breast Cancer? Be aware of the genes?

Too often I see women who have close family members who have been diagnosed with breast cancer and yet they ignore their own symptoms of breast cancer. The reasons they give are varied “Oh she was overweight, I am not”, “She drank alcohol and I don’t drink”, She lived on junk food, I’m a vegetarian,” While lifestyle issues are important in the development of cancer there are other factors to consider. I had a patient say to me “I’m the healthiest sick person you’ll meet” She eats right, exercises regularly and has appropriate body weight for her height, yet she too had cancer.

Over the last decade we have become increasingly aware that genes also have a role to play in the development of breast cancer. So far a number of gene mutations have been discovered that are associated with an increased risk of getting cancer. The two main ones for Breast cancer are the Breast Cancer Gene I (BRCA I) and the Breast Cancer Gene II (BRCA II). Having either of these gene mutations significantly increases the risk of developing breast cancer. These genes are also associated with the development of other cancers particularly ovarian, pancreatic and prostate cancers.

The chance of an individual carrying the BRCA I or BRCA II genes increases if: there are many first degree(mother, sister, daughter)or second degree (grandmother, aunt) relatives with breast cancer, ovarian cancer or both ; if there is a first degree family member with breast cancer below the age of 50; a first degree male relative with breast cancer or a first degree relative with cancer in both breasts. These genes are also seen with higher frequency in the Ashkenazi Jewish population.

What is the value of finding out if you have the gene?

It allows close monitoring which increases the chances of making the diagnosis early, particularly at stage 0. This significantly improves ones chance of a cure. It also guides treatment strategies, but probably most important is the fact that some prevention strategies can also be utilized once the risk is known.

The test is simple; it can be carried out on a blood sample. Unfortunately it is quite costly and has to be processed overseas. However, more and more women are benefiting from this improved assessment of risk. It is therefore important that both lifestyle and genetic risk factors be considered as we strive to reduce breast cancer.

Prepared by
Dr Angela Scott
Clinical Haematologist/Oncologist