INFORMATION FOR WOMEN ABOUT FAMILY HISTORY OF BREAST CANCER AND OVARIAN CANCER

Why does breast or ovarian cancer occur?

Sometimes some genes, which normally protect against cancer, develop a fault. This causes the cells to grow out of control, leading to cancer. These genetic faults, which occur throughout life, are not inherited. This occurs more often in older women. The reasons for this are not yet fully understood.

What is a woman's chance of developing breast or ovarian cancer?

All women have a chance of developing breast or ovarian cancer at some time during their life. The risk of developing either cancer increases with age.

- About 1 in 11 women will develop breast cancer before the age of 75
- About 1 in 120 women will develop ovarian cancer before the age of 75
- Most women who develop breast or ovarian cancer are over the age of 50

What are the "risk factors" for breast and ovarian cancer?

There are many things, called risk factors, which can increase a woman's chance of developing breast or ovarian cancer. Being female, increasing age and family history are the main risk factors.

For more information about risk factors for breast cancer, visit www.nbocc.org.au/risk.

For more information about risk factors for ovarian cancer, visit www.nbocc.org.au/ovarian-cancer/about/what-causes-ovarian-cancer.

What is meant by a family history of breast or ovarian cancer?

A family history of breast or ovarian cancer means having one or more blood relatives who have, or have had, breast or ovarian cancer. These relatives could be on either the father's or mother's side of the family.

Because breast cancer is common, many women will have a family history by chance. However, some women with a family history may have inherited a faulty gene which increases the risk of cancer. The women most likely to have inherited a faulty gene are those with the strongest family history of breast or ovarian cancer.

Understanding your family history of breast or ovarian cancer can provide an indication of your chance of developing either disease:

- most women have close to the average chance for the Australian population
- some women have a moderately increased chance
- a few women have a high chance

A woman could be at potentially high risk of developing either breast or ovarian cancer if she has:

1. Three or more close blood relatives on the same side of the family with breast or ovarian cancer

OR 2. Two or more close blood relatives on the same side of the family (mother's or father's) with breast or ovarian cancer, plus one or more of the following features on the same side of the family:
   - additional relative(s) with breast or ovarian cancer
   - breast and ovarian cancer in the same person
   - breast cancer before the age of 40
   - breast cancer in both breasts
   - breast cancer in a male relative
   - Jewish ancestry

OR 3. Three or more close relatives on the same side of the family with colorectal cancer, cancer of the uterus, gastric cancer and cancers involving the renal tract (possible hereditary non-polyposis colorectal cancer or Lynch Syndrome)

OR 4. A family member who has had a genetic test that has shown that he or she has an inherited fault in a gene associated with breast or ovarian cancer.

Inheriting a breast or ovarian cancer gene fault

Breast or ovarian cancer caused by inheriting a faulty gene is called hereditary cancer. We all inherit a set of genes from each of our parents. Sometimes there is a fault in one copy of a gene which stops that gene working properly. This fault is called a mutation. There are several genes for which inherited faults may be involved in the development of breast or ovarian cancer. These are genes which normally prevent a woman developing breast or ovarian cancer.

Some of these are genes that you may have heard of are called BRCA1 and BRCA2. Their names come from the abbreviation of "breast cancer one" and "breast cancer two". If a woman has inherited a fault in one of these genes, she has a high chance of developing breast or ovarian cancer; although it does not mean that she is certain to develop cancer.

Around 5% of all breast cancers and up to 15% of invasive ovarian cancers can be explained by an inherited gene fault in BRCA1 or BRCA2.

A woman who has had a gene fault in BRCA1 or BRCA2 found through genetic testing is at high risk of developing breast or ovarian cancer. Men can also carry these gene faults.

Early detection - what you can do

The earlier that cancer is found the more successful the outcome is likely to be. Therefore, it is recommended that:

Breast cancer

- women of all ages, regardless of whether they attend for mammographic screening, are aware of how their breasts normally look and feel and promptly report any new or unusual changes to their general practitioner.
- women 50-69 years attend the BreastScreen Australia program for free screening mammograms every two years. Women aged 40-49 years are also eligible for this Program, but population mammographic screening is not recommended for women younger than 40 years. (**For a BreastScreen appointment ring 13 20 50 from anywhere in Australia**)
- Women at high risk of breast cancer may be advised to begin screening at a younger age, and at more frequent intervals, than those at population risk

Ovarian cancer

- women consult their GP if they have persistent symptoms that are unusual for them such as abdominal or pelvic pain, bloating, unexplained weight gain or loss, or fatigue.

In addition, for women with a family history

Women concerned about their family history can talk to their general practitioner. It may be appropriate for some women with a strong family history to be referred to a family cancer clinic. These clinics can:

- provide information about a person's risk of developing cancer
- give an estimate of the likelihood of carrying an inherited mutation in a cancer-predisposing gene
- provide advice about possible strategies that might help reduce the risk of cancer
- provide counselling and support
- discuss what medical check-ups may be appropriate
- if appropriate, discuss the limitations, potential benefits, and possible consequences of genetic testing.

You can find out more about breast and ovarian cancer by visiting the NBOCC website at www.nbocc.org.au

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