

Oxford Regional Genetic Department

Breast Cancer in the Family

Information for women
with a moderately increased
risk of breast cancer



Breast cancer in the family – what does this mean?

Breast cancer is the most common cancer affecting women in the UK. Many of us will either have a relative with breast cancer, or know someone who had breast cancer. The great majority of breast cancers are not inherited. This leaflet aims to answer some of the questions you may have about your family history of breast cancer. You may have had breast cancer yourself. If you have, this leaflet may be relevant to your family members.

How common is breast cancer?

About 45,000 women are diagnosed with breast cancer in the UK each year. Women have about 1 chance in 9 (11%) of developing breast cancer during their lifetime. More than 80% of women who get breast cancer are over 50 years of age. The chances of surviving breast cancer have greatly improved. More than 80% of women are alive more than 5 years after their cancer treatment. Survival improves if the cancer is diagnosed at an early stage.

How often is breast cancer inherited?

Very few women (about 5%) have breast cancer because of an inherited tendency. Most breast cancers occur due to chance and are not inherited.

What type of family history suggests an inherited tendency to develop breast cancer?

It is very unusual to have an inherited tendency to develop breast cancer. It generally only occurs in families where:

- Either several close relatives developed breast cancer
- or, individuals had breast cancer at younger ages than is usual
- or, some relatives had breast cancer and others had ovarian cancer
- or, someone had both breast and ovarian cancer.

In families like this there may be an altered gene which means people are more likely to develop breast cancer.

Is the cancer in my family inherited?

When we assess your family history we look at the number of relatives who had cancers and the ages at which they happened. Cancers occurring at older ages are less likely to be inherited. The types of cancer are also important because only some cancers are related to each other. Many cancers, such as lung cancer and cervical cancer are usually due to environmental rather than genetic effects.

From the information you provided, the cancers in your family are unlikely to be caused by a known inherited form of breast cancer. It is more likely that the cancers developed because of environmental factors combined with other genes. This may be because there have only been one or two related cancers in your family, or because they have occurred at older ages, or because they only affected more distant relatives.

Is my risk of breast cancer increased?

The history of cancer in your family means some relatives may have a moderately increased chance of developing breast cancer. A moderately increased risk means your chance of developing breast cancer is only a little higher than women in the general population. It is still much more likely you will never develop breast cancer.

Should I be having any extra screening?

If you have a moderately increased chance of breast cancer you may be offered extra breast screening. Usually this involves having mammograms every 12 months between the ages of 40 and 50. After this, you would be offered mammograms every 3 years until the age of 70. These are arranged by the NHS National Breast Screening Programme. Screening is offered in order to pick up cancers as early as possible. This enables earlier treatment which increases the prospects for a good outcome.

What are mammograms?

Mammograms are carried out at your local breast care clinic or screening unit. A small dose of X-rays is used to examine each breast, just like having a chest X-ray. Having too many X-rays is potentially harmful because it may increase the risk of cancer. Where the family history indicates an increased risk of cancer, the benefits of regular mammograms will outweigh the risks.

Mammography may also detect other changes in the breast which are completely harmless. Occasionally this can result in someone being recalled for further tests such as a biopsy. Most often these turn out to be normal but it may cause some anxiety.

Mammograms do not always pick up breast cancers. This is particularly so in younger women because their breast tissue is often more dense than in older women. It is still not clear if mammography before the age of 50 is beneficial. In time we expect further medical research will be able to answer this question.

What breast symptoms should I be aware of?

In most women, breast cancer is first noticed as a painless lump in the breast. Other signs may include:

- A change in the size or shape of a breast
- Dimpling of the skin of the breast
- A thickening in the breast tissue
- A nipple becoming inverted (turned in)
- A lump or thickening behind the nipple
- A rash (like eczema) affecting the nipple
- A bloodstained discharge from the nipple (this is unusual)
- A swelling or lump in the armpit

Pain in the breast is usually not a symptom of breast cancer. In fact, many healthy women find that their breasts feel lumpy and tender before their period. Some types of benign (not cancerous) breast lumps can be painful. Often there are no outward signs of breast cancer that you can see or feel.

Even if you do have one or more of these signs, it still doesn't mean you have breast cancer. Most breast lumps turn out to be benign. However, it's important that you tell your doctor immediately if you experience any worrying symptoms.

Can I have a gene test for inherited breast cancer?

It is unusual to find a strong hereditary cause for breast cancer in a family, even if there are several cancers. So far research has found two genes for hereditary breast cancer. Individuals who have a change in one of these genes often develop breast cancer at a young age and sometimes other cancers too. Genetic testing for hereditary breast cancer is not useful unless there is a strong family history including cancers at young ages.

Other breast cancer genes are thought to exist but more research is needed to find them. We might suggest storing a blood sample from an affected relative so that genetic testing may be offered in the future when we know more about these other genes. We may also invite you to consider taking part in a research study looking for other breast cancer genes. However, there is no obligation to participate.

What should I do if someone else develops cancer?

This may not affect your risk of developing cancer. However, it would be important for you to check with us in case it alters our advice.

How do hormones or environmental factors affect my chances of breast cancer?

Our knowledge of the causes of breast cancer has greatly improved. Unfortunately we still do not understand all of the environmental factors that affect the chances of developing breast cancer. We do know that certain hormonal factors are important because they may increase the risk of breast cancer.

They are:

- Starting your periods early (under 12 years of age)
- Having a late first pregnancy (over 30 years)
- Having no children
- Having a late menopause

There is evidence that breast feeding for 12 months or more may reduce the risk of breast cancer. Overall, women have little or no control over risk factors for breast cancer.

Research has shown that taking the oral contraceptive pill does not significantly alter the risk of breast cancer. There might be a slightly increased risk while taking the pill but the added risk will fade within a few years of coming off the pill.

There are some concerns about Hormone Replacement Therapy (HRT) and breast cancer. If taken for more than 5 years after a natural menopause, HRT which contains oestrogen plus other hormones, does increase the risk of breast cancer. The longer HRT is taken, the greater the increase in risk. Again, the added risk will decrease once HRT is stopped. For women who take HRT before their natural menopause, perhaps because they had their ovaries removed, there does not seem to be an increased risk. However, they should stop their HRT soon after the age of 50 to stop their risk of breast cancer increasing.

Using HRT to manage menopausal symptoms is a very personal decision. You will need to talk about this with your gynaecologist or GP.

Can I do anything else to reduce my risk?

Some lifestyle factors are thought to reduce the risk of breast cancer. Maintaining your weight within normal limits may help prevent your risk from rising. Evidence indicates that obesity does increase risk, particularly after menopause. This may be because overweight people have different hormone levels compared to those of normal weight.

Drinking excessive amounts of alcohol may increase your breast cancer risk. Department of Health guidelines state that women should not consume more than 2 to 3 units of alcohol per day (less than 14 units per week) There is good evidence that frequent physical exercise reduces cancer risk. This may be because physical activity helps to regulate women's hormone levels.

A balanced diet including plenty of fruit and vegetables is recommended.

Smoking may also increase the risk of breast cancer. Support and advice with stopping smoking is readily available through GP surgeries.

What about my relatives?

Some of your relatives may also benefit from extra breast screening. They can contact us to discuss this or ask their GP to refer them to their local genetics centre. Should you wish, we would be able to share the information we have with their own genetics centre.

If you remain healthy and cancer-free it is unlikely that your children's risk of breast cancer will be increased. However, they may wish to look into this around the age of 35 to find out more about their risk.

Useful websites for further information:

<http://www.cancerhelpuk.org/>

<http://www.macmillan.org.uk>

<http://www.breastcancercare.org.uk/>

If you need more advice please contact:

Oxford Family Cancer Service

Clinical Genetics Unit

Churchill Hospital

Old Road

Headington

Oxford

OX3 7LE

Telephone: **01865 226 034**

Fax: **01865 223 572**

If you need an interpreter or need a document in another language, large print, Braille or audio version, please call **01865 221473** or email **PALSJR@ouh.nhs.uk**

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Produced by the Oxford Regional Genetic Department

Oxford University Hospitals NHS Trust

Headington, Oxford, OX3 9DU

Telephone: 01865 74 11 66