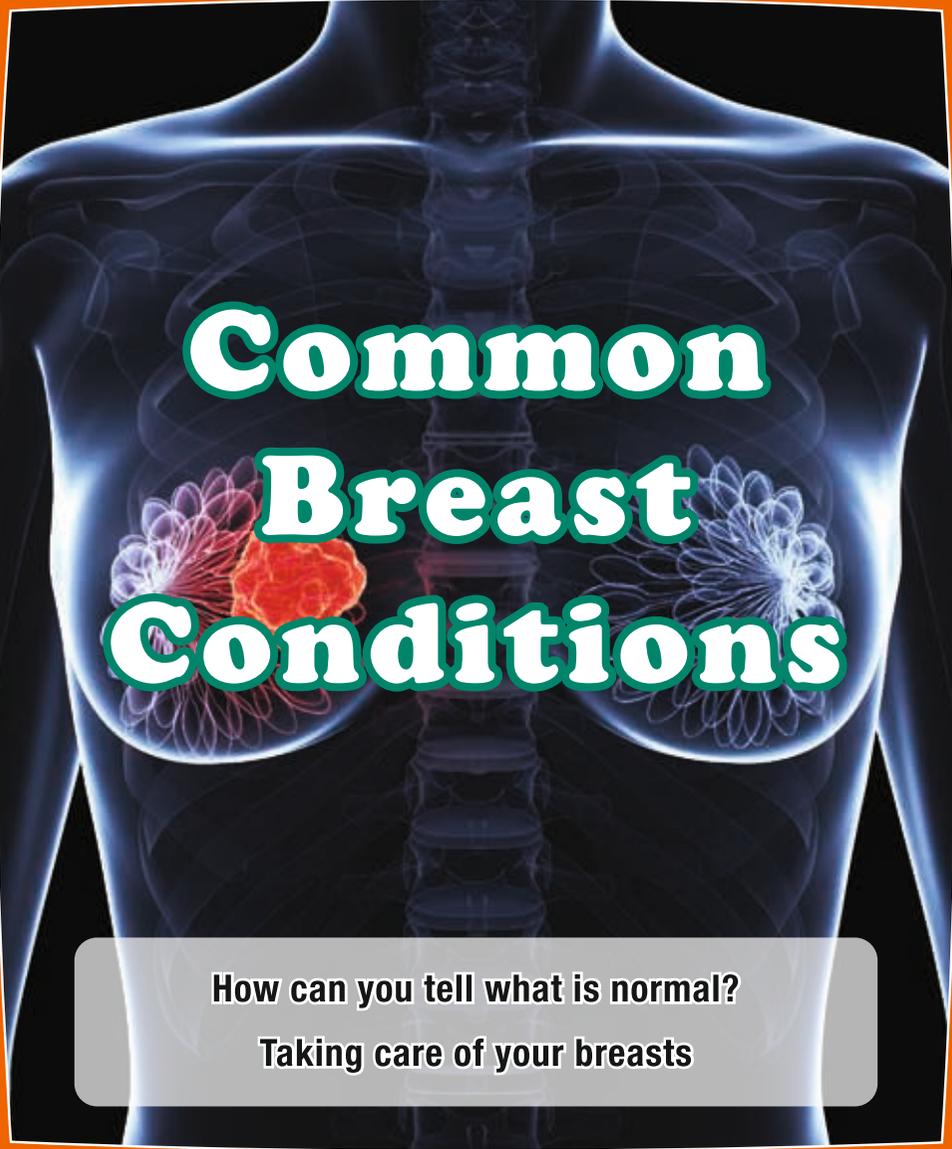


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Centre Singapore

SingHealth

A blue-tinted illustration of a human torso from the neck to the waist. The ribcage and spine are visible. The breasts are highlighted with a glowing effect. On the left breast, there is a red, irregularly shaped lump. The text 'Common Breast Conditions' is overlaid in the center of the chest area.

Common Breast Conditions

How can you tell what is normal?

Taking care of your breasts

An Educational Initiative by National Cancer Centre Singapore

Common Breast Conditions

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Disclaimer

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Introduction

Our breasts are significant for many different reasons. The way we feel about our breasts often influences how we feel about our own body image and ourselves.

Our breasts go through many changes during our lives. Most of these changes are quite normal and are due to the fluctuating levels of hormones in our bodies. These hormone levels alter during ovulation, menstruation, pregnancy and menopause.

As we age, our hormone levels gradually decrease and we may experience various changes in our breasts. These may include unusual pain, swelling, a lump or general 'lumpiness', nipple retraction, or even discharge from the nipple. Although most of these changes are benign (non-cancerous), they can make us very anxious and concerned. It is very important that these changes are thoroughly checked by a doctor.

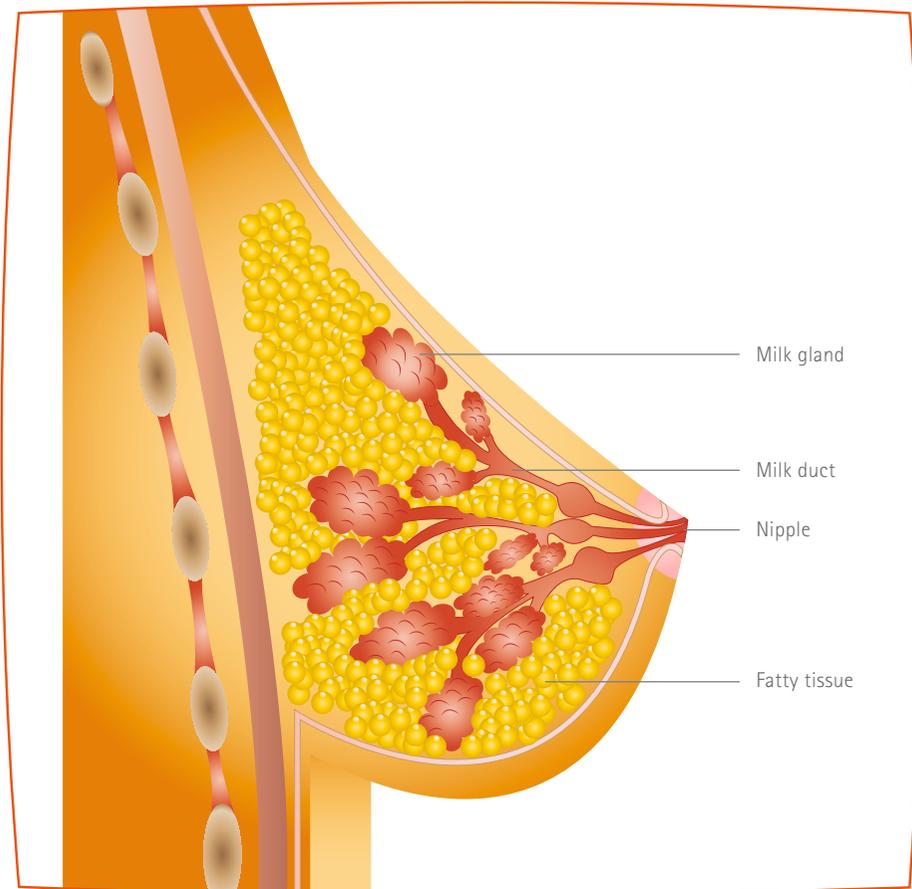
We hope this booklet will answer some of the questions you may have about breast changes. If you find this booklet helpful, share it with your family and friends. And if you have any queries about the contents in this booklet or if there is any information you are seeking that is not covered here, please contact the Cancer Helpline at 6225 5655 for more information.

Other cancer information booklets are also available at the National Cancer Centre Singapore website. Contact the Cancer Helpline to request for a hardcopy of these booklets. For electronic versions of this booklet and other booklets, please visit our website: www.nccs.com.sg.

ABOUT YOUR BREAST

Your breasts are glandular organs designed to produce milk after pregnancy. Breast tissue extends downwards from the collarbone to the side of the body where the armpit is located. Breast tissue comprises a large number of special glands which produce milk after childbirth. The glands consist of milk sacs where milk is made, and ducts that carry the milk to the nipple. These milk glands are arranged in 15 to 20 lobes. The glands are surrounded by fibrous tissue that helps to give breasts their structure and shape.

Your breasts also contain blood vessels, lymph glands and nerves. The lymph glands are connected by a system of lymph ducts to other lymph glands in your armpits. These lymph glands and ducts are part of the lymphatic system, which helps your body fight infection.



COMMON CHANGES

Your breasts go through many changes when you reach puberty and will continue to change as you get older. Initially, breasts are dense, glandular structures needed for producing milk, but gradually, they become less glandular and more fatty. By the time you reach menopause, your milk glands will have largely been replaced by fat. Thus, as you get older, your breasts will become softer and less lumpy.

Changes in your breasts also occur with your monthly periods (menstrual cycle). They may feel swollen, tender or lumpy just before your period. This is normal and is due to the body's response to changes in hormone levels. It is normal for breast tissue to grow a little and fill with fluid during the early part of the monthly cycle. The fluid is reabsorbed when your hormone level falls at the start of your period. These normal changes continue every month until you reach menopause.

HOW CAN YOU TELL WHAT IS NORMAL?

The best way to know your breasts and what changes are normal or abnormal is to regularly examine your own breasts. Women who practise breast self-examination (BSE) every month quickly become familiar with the normal look and feel of their breasts. They are then able to spot any unusual changes quite easily.

There are several ways of learning how to do BSE properly. You can ask your doctor to teach you or you can learn it yourself by using BSE instruction pamphlets available from the Singapore Cancer Society, the Health Promotion Board, Breast Cancer Foundation and the National Cancer Centre Singapore.

It is good practice to ask your doctor to examine your breasts regularly on an annual basis. Mammograms (breast x-rays) and breast ultrasound are also possible alternatives to discuss with your doctor. If you wish to have more information on mammograms, early detection and preventive actions, please contact the Cancer Helpline on tel: 6225 5655 or email: cancerhelpline@nccs.com.sg.

A mammogram is a special x-ray of the breast, which uses low doses of radiation. Mammograms can be used to check healthy women for early signs of breast cancer before the woman herself is aware of any change or before a lump can be felt. These are called screening mammograms.

Women aged 40 to 49 years old who wish to go for screening mammograms, are advised to talk to their doctor about the benefits and limitations of mammograms. Women aged 50 years and above are encouraged to go for screening mammograms once every 2 years. Studies in the west have shown that breast cancer is more common in older women. Research has also proven that with well-coordinated programmes, screening mammograms can detect breast cancer early, resulting in reduction in the mortality rate from breast cancer.

While all women are at risk of developing breast cancer, the risk increases as we grow older. Breast tissue in younger women tends to be denser. This makes it more difficult to detect small changes in the breast. As there is no evidence that screening mammography benefits women under 40, this test is not recommended for women in this age group. However, if you experience some symptoms that you are worried about, please consult your doctor for advice. If there is strong family history of breast cancer, especially at an early age, you can also consult your doctor or visit the Cancer Genetics Service at the National Cancer Centre Singapore (NCCS) for advice. To make an appointment, please call 6436 8088.

TAKING CARE OF YOUR BREASTS

- Examine your breasts monthly. Perform Breast Self Examination (BSE) one week from the first day of your period. If you are no longer menstruating choose a same date each month that is easy to remember.
- Report any breast changes to your doctor, for example: redness and swelling, presence of a lump, skin changes or discharges from the nipple.
- Have an annual breast examination by your doctor.
- Talk with your doctor about the benefits of breast screening.

COMMON CONDITIONS

Breast pain

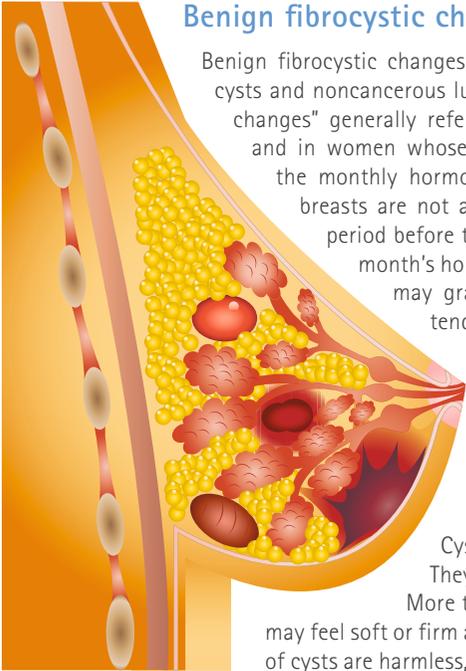
Breast pain is very common and is called mastalgia. Your breasts respond to the changes linked with your menstrual cycle. Many women experience some degree of tenderness and/or pain before or during their periods. This is normal but sometimes the pain or tenderness can be rather severe and interferes with normal routine.

Often, all that is needed is a visit to the doctor for assurance that the pain is not due to cancer. For some women, the pain may be severe enough to require some form of treatment.

Tips for pain relief

Following reassurance from your doctor, there are some simple things you may try if you suffer from breast pain. Try several of these ideas before finding one that works for you.

- Wear a good supportive bra - some women find that wearing a good supportive bra at all times even when they are in bed, helps by reducing breast movement. Ensure that the bra is not too tight fitting to avoid constriction to the breast.
- Try placing a hot pad wrapped with a towel on your breasts.
- Have a warm bath or shower.
- Cold shower or ice pack - some women find that having a cold shower or holding an ice pack over their breasts is more effective.
- Reducing caffeine intake or cutting it out completely can also help to relieve breast pain. Caffeine is found in coffee, tea, colas and chocolates. Cutting down on the amount of salt and fat in your diet may be beneficial as well.
- Evening Primrose Oil - other women have found that Evening Primrose Oil, taken in tablet or liquid form, can help relieve pain or premenstrual symptoms. Evening Primrose Oil is available without prescription from pharmacies and health food stores. If none of these methods help, you may need to see a breast specialist. More complex treatments may be advised.



Benign fibrocystic changes

Benign fibrocystic changes are very common and are the cause of most cysts and noncancerous lumps in the breast. The term "benign fibrocystic changes" generally refers to a condition which can develop with age and in women whose breasts appear to be particularly sensitive to the monthly hormone changes. For some of these women, their breasts are not able to completely return to normal after their period before they are stimulated again by the rise in the next month's hormones. Over the months and years, breast tissue may gradually become thicker with extra 'lumpiness', tenderness, or the development of cysts. These conditions usually disappear after menopause.

However, for women who use hormone replacement therapy these symptoms may continue.

Cysts

Cysts are fluid filled sacs and are extremely common. They may be part of the range of fibrocystic changes. More than one cyst may occur at the same time. Cysts

may feel soft or firm and may sometimes be painful to touch. Majority of cysts are harmless, but any lump that can be felt should be checked

by your doctor to be absolutely sure that it is not cancer. An ultrasound examination may be used to confirm that a lump is a cyst.

Your doctor may choose to withdraw fluid from the cyst using a syringe with a very fine needle. This procedure is called fine needle aspiration. It may cause some discomfort but it should not be painful. Your doctor may send the fluid to a laboratory to be examined under a microscope. Once the fluid has been removed the cyst will usually just disappear. It may come back and need to be aspirated a second time. Should this happen frequently, you may need to have the cysts surgically removed.

Fibroadenomas

Fibroadenomas are harmless lumps of fibrous tissue. They usually feel firm and rubbery and have a smooth texture. A fibroadenoma may move around in one area of your breast. Although they are more common in younger women between the ages 18 to 30, they can also be found in older women above 30 years and more. As with all lumps, it's important to have it checked by your doctor. You may find that you need further tests or a biopsy.

Nipple discharge or nipple inversion

A discharge from your nipple or inversion (pulling-in) of your nipple needs to be checked by your doctor. If you are breastfeeding, it is quite normal for milk to leak from your nipples in-between feeds. After your baby has been weaned, you may still notice a milky discharge. This is not unusual; try not to squeeze your nipples as this will continue to stimulate milk flow. Usually the discharge will gradually stop. If it continues, or if the colour or consistency of the discharge changes, you should consult your doctor. If you develop new discharge or 'pulling-in' of the nipple, talk with your doctor. Further tests may be needed.

POSSIBLE TESTS

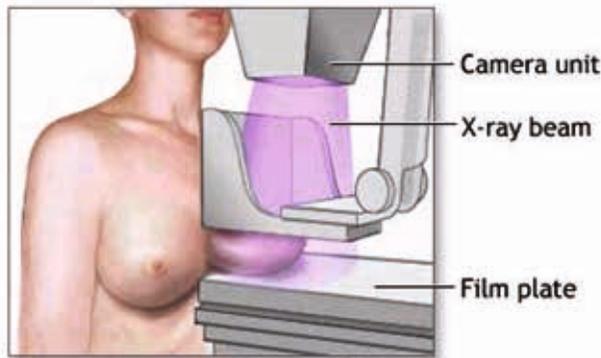
When you see your doctor to get a condition checked, he/she will examine your breasts. If you have noticed a specific change, such as a lump, try to pinpoint the area clearly. This will assist your doctor with the examination.

Your doctor may then advise you to have some tests so that a definite diagnosis can be made and to determine that your condition is benign (non-cancerous). These tests may include one or more of the following.

Mammogram

If you have a breast lump and you are above 35 years old, a mammogram is often suggested to help with the diagnosis. The mammogram checks the presence and position of the lump as well as any other abnormalities in your breasts. More detailed x-rays may be needed as compared to those taken for a screening mammogram. Abnormal appearances may be found even if no lump is felt in the breast.

Sometimes a lump that can be felt is not seen on a mammogram. Other tests are often necessary to determine whether the lump is malignant or benign. If you have recently had a mammogram, remember to bring with you the x-rays (and report if available) when you consult the specialist.



Ultrasound

Another test you may have is an ultrasound. This test uses high-frequency sound waves to scan your breasts. The vibrations from these sound waves are reflected off your breast tissue and transformed into electrical signals that show up as an image on the screen. Ultrasound does not use radiation.

This test can frequently differentiate solid lumps from cysts.

Fine Needle Aspiration

For this test, your doctor uses a syringe with a very fine needle to withdraw fluid or cells from a breast lump. This is usually not painful. If the lump is just a cyst, withdrawing fluid in this way will usually make the cyst disappear. However, if the lump is solid, your doctor may withdraw some cells from it. The cells will then be sent to a laboratory for examination under a microscope.

Core Needle Biopsy

This method obtains a few slivers of tissue from an area of abnormality with a wide bore needle. Local anaesthetic is used to numb the breast area first, followed by a small incision in the skin to allow easy insertion of the needle. If the abnormality is non-palpable, the procedure can be performed with ultrasound or x-ray guidance.

Large core needle breast biopsy (Mammotome®)

Mammotome® Breast Biopsy uses a vacuum-assisted device to obtain tissue samples from non-palpable lesions. Small samples of tissue are removed from the breast using a large core needle which is guided precisely to the suspicious lesion via X-ray or ultrasound. This procedure is minimally invasive as compared to an open surgical biopsy. It is performed as a day surgery procedure. It has the ability to sample tiny abnormalities called microcalcifications, making early diagnosis of breast cancer possible. It is done under local anaesthetic and takes about 30 to 45 minutes to complete. The procedure is usually not painful but you may experience some discomfort.

Excision biopsy

An excision biopsy involves the surgical removal of a lump or sample of suspicious tissue for examination under a microscope. It will give a definite diagnosis of your condition. Excision biopsies can be performed either under local or general anaesthesia, depending on the size and position of the lump. You can leave the hospital on the same day.

If you are unsure of how the biopsy will be done, ask the surgeon to explain what it involves. You may want to ask about the size and position of the scar, whether you will feel any pain or discomfort and how long you will need to be away from work.

Having a breast condition can be stressful, particularly if you need lots of tests. While you may feel relieved to get it all cleared, it may still take a little while to put the concern behind you. Ask your doctor about further check-ups. Talking with your partner, family or friends can be helpful.

QUESTIONS YOU CAN ASK YOUR DOCTOR

When you see your doctor, be specific about your concerns. For example, which part of the breast is affected, how long have you had the condition, is the lump there all the time? The following questions may help your discussion with your doctor:

About your illness

1. What do you think is causing my breast pain?
2. How can I manage my breast pain?
3. Do I need to see a breast specialist?
4. Am I at increased risk of breast cancer?
5. What can I do to reduce my risk of breast cancer?

About tests

1. What tests do I need to check a lump?
2. Do I need a mammogram?
3. What were the results of my tests?
4. Do I need more tests?



If you have other questions, you may want to add on to the list. Feel comfortable to ask the doctor to explain the answers to you again if you do not understand them. It is also useful to write down the points you have discussed to act as a reference and reminder when you need them.

ANSWERS TO COMMON QUESTIONS

Q. Are most breast lumps due to cancer?

A. No. Only two lumps out of every 10 will be due to cancer. This means that 80% of all breast lumps are not cancer. However, the chance of a lump being cancerous increases as you get older. Some women do not have a definite lump but can feel areas of general 'lumpiness' in their breasts. Often your doctor will be able to reassure you that this is normal but it is important that you ask your doctor to thoroughly check for any change.

Q. What are the most common types of benign lumps?

A. The most common benign lumps are fibrocystic changes, breast cysts, and fibroadenomas. These are often described as benign, tiny, fluid-filled sacs that might feel like lumps. They might be hard or rubbery, and often fluctuate with the menstrual cycle. A woman can also have a single breast lump that might be large or small. These most often occur in women who are in their reproductive years.

Q. What should I do if I find a lump?

A. A lump in a pre-menopausal woman might be monitored for one to two months to see if it changes. It may be related to hormone fluctuations and the menstrual period. Any unexplained breast lump that persists should be checked by your doctor. Call and make an appointment.

Q. Can a benign lump turn into cancer?

A. The chances of cancer developing in a benign lump may be no different than in any other part of the breast. However, it is very important for you to make sure that the lump is non-cancerous in the first place.

Q. Can breast cancer be found early?

A. Screening tests and examinations are used in detecting a disease, such as cancer, in people who do not have any symptoms. The goal of screening is to find cancers before they start to cause symptoms. Breast cancers that can be felt tend to be larger and are more likely to have spread beyond the breast. In contrast, breast cancers found during screening examinations are more likely to be small and still confined to the breast.

The size of a breast cancer and how far it has spread are the most important factors in predicting the prognosis of a woman with this disease. Detecting breast cancer as early as possible improves the chances of treatment being successful. Following the guidelines of breast cancer screening improves the chances of cancer being diagnosed at an early stage and treated successfully.

Q. If I have a benign breast condition, am I more likely to get breast cancer?

A. Occasionally some women with particular benign breast conditions are slightly more at risk. However, you will need to talk this over with your doctor.

Q. Do benign conditions come back?

A. Generally no, but a small number of women will develop new benign lumps in the future.

Q. What if the lump turns out to be cancer?

A. If breast cancer is detected early, it has a better chance of being cured. Your doctor will discuss the diagnosis and the best treatment options for you. You can also call the Cancer Helpline at 6225 5655 for general information and counselling on breast cancer, as well as to find out the type of support services available.

Q. I have just had a mammogram and the specialist said it showed microcalcification. What does it mean?

A. A number of conditions can lead to traces of calcium forming in the tissues of the breast. Microcalcification are tiny specks of calcium, less than 1mm in size, which show up as bright white spots against the grey/black background of the mammogram picture.

About 4 out of 10 breast cancers contain clusters of microcalcification. Microcalcification is even more common in the precancerous condition of ductal carcinoma-in-situ of the breast (DCIS) where it is seen in about three quarters of all cases.

In mammograms, microcalcification may be the first sign that a cancer is present, with clusters of calcium specks showing up even though no lump is felt and the lump is not seen on the mammogram film.

Microcalcification does also occur with a number of completely benign, noncancerous, breast conditions including fibroadenomas and papillomas. Very often the specialists can tell from the shape and pattern of the calcium specks whether or not a cancer is likely to be present. If there is any uncertainty your doctors will arrange a biopsy to get a definite answer.

Q. What if there is breast cancer in my family?

A. Women who have a strong family history, such as a mother and/or sister who developed breast cancer before menopause may be at increased risk of breast cancer. If you are concerned about a family history of breast cancer, talk with your doctor. You may also want to consult a breast specialist.

Q. Will the biopsy scar be noticeable?

A. A biopsy scar is usually small and will be less noticeable as it fades with time. Some women are not worried about the scar while for others it may be more of a concern. If you need a biopsy, check with your surgeon beforehand about the likely size and position of the scar. Please check with your doctor before applying anything onto the area.

Q. Will I be able to breastfeed after a biopsy?

A. Yes. A biopsy will not interfere with your ability to breastfeed. Even if you need a biopsy while you are breastfeeding, you can still continue to do so after the procedure. Do discuss this with your doctor.

Q. What should I do if my doctor says my breast condition is nothing to worry about but I still feel concerned?

A. If your doctor has suggested your condition is hormonal, you may wish to wait until your next period to see if it still persists. If it does or if you are still concerned, go back to your doctor or seek a second opinion. You can also call the Cancer Helpline on telephone 6225 5655 or email: cancerhelpline@nccs.com.sg

Q. What can I do for myself to continue good breast health?

- A.
- Perform a monthly breast self-examination.
 - Have a baseline mammogram by the age of 40, and then as recommended by your healthcare provider.
 - Have breast examinations by your health care provider at least once a year.
 - Keep track of your family health history.

USEFUL CONTACT DETAILS

- General Enquiries : 6436 8000
- Cancer Helpline : 6225 5655
- Breast Screen Singapore Call Centre : 6536 6000
- Singapore Cancer Society : 1800-727-3333



CANCER RESOURCES ON THE INTERNET

American Cancer Society

www.cancer.org

American Society of Clinical Oncology

www.asco.org

Westmead Breast Cancer Institute

www.bci.org.au

Cancercare

www.cancercare.org

MD Anderson Cancer Centre

www.mdanderson.org

National Cancer Institute

www.cancer.gov

Medline Plus

www.medlineplus.gov

Susan G. Komen Breast Cancer Foundation

ww5.komen.org

OncoLink

www.oncolink.org



For more information on cancer, please call the

Cancer Helpline at Tel: 6225 5655
or email cancerhelpline@nccs.com.sg

MONDAYS - FRIDAYS : 8.30am to 5.30pm

SATURDAYS, SUNDAYS : CLOSED (Please leave a message)
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