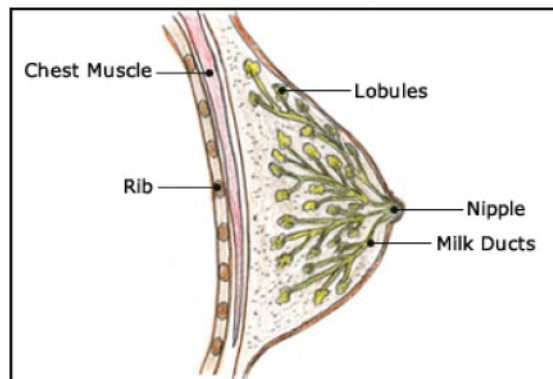


Health Bites

Normal Breast

- The normal breast tissue varies in size and shape.
- The breasts rest in front of the rib cage.
- The breasts are made up of fatty tissue, milk ducts and lobes.
- The breasts produce milk to feed the baby when the woman is pregnant.



Normal Breast

What is breast cancer?

- Normal breast cells grow in an orderly and controlled manner
- Cancer cells are cells that grow abnormally.
 - They are different in shapes and sizes.
 - They divide quickly and form a lump.
 - They can break away from the original site and spread to other parts (organs) of the body.
 - There are different types of breast cancer.
- There are two broad types of breast cancer.

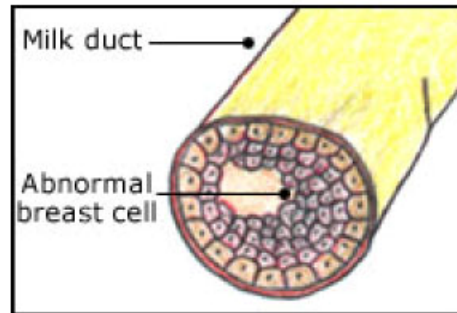
Non-invasive Breast cancer

- The cancer cells are contained within the milk ducts.

Ductal carcinoma in situ (DCIS)

- The ductal cells divide abnormally.
- They stay inside the ducts.
- However, if left untreated, they can break out of the milk ducts and spread (become invasive). About one third of the cancers diagnosed through mammography are DCIS but non-invasive.

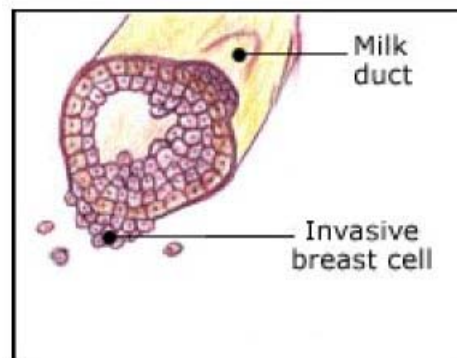
- Treatment is usually very effective and no chemotherapy or other adjuvant therapy is required if the breast cancer is diagnosed at this early stage.



Non invasive breast cancer

Invasive breast cancer

- Abnormal cancer cells spread outside the milk ducts or the lobules.
- These abnormal cells first spread to the surrounding breast tissue.
- Breast cancer cells move into the lymph nodes or the blood stream.
- They then travel to other parts of the body.
- The most common parts of the body they travel to are the lungs, liver and bone.



Invasive Breast Cancer

Diagnosing Breast Cancer

How is breast cancer diagnosed?

Your doctor will conduct:

- Clinical breast examination (CBE).
- Breast ultrasounds and mammography.
- Needle aspiration biopsy.
 - Breast cancer is present if all, or any one, of the three tests is positive.
 - You do not have breast cancer if all of the tests are negative.

What is a Clinical Breast Examination (CBE)?

Clinical breast examination consists of visual inspection and palpation techniques.

- It is done with the woman sitting and then lying down.
- During sitting, you are instructed to raise your hands slowly above the head. Your doctor will inspect for breast distortion and withdrawing of skin on the breast.
- When lying down, your doctor will palpate the breast and the surrounding tissues for presence of lumps.

What is Diagnostic Ultra sound and Mammogram?

A breast ultrasound is limited to the portion of the breast where the abnormality was detected on CBE.

A mammogram is an X-ray taken on the breast. It is used to detect very small lumps and abnormal tissue that are difficult to feel.

What is a Needle Biopsy?

A needle is inserted into the lump using a spring-loaded device, to remove samples of tissue. These are then sent to the laboratory for microscopic examination to detect cancer cells.

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Treatment Options

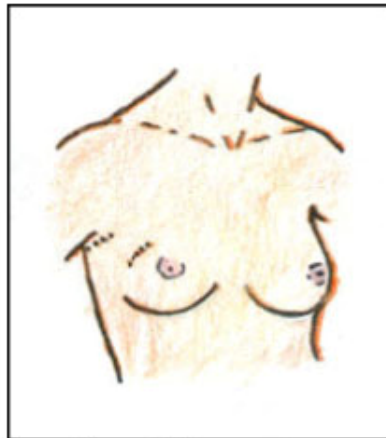
Why do I need surgery?

Surgery is used to remove the cancerous area from the breast. During the surgery, some of the lymph nodes under the arm may be taken out to be examined under the microscope to check for presence of cancer cells. This will help the doctor to decide whether other forms of treatment are needed. Numbness and discomfort can be felt on the inside of your arm after the surgery.

After the surgery wound is healed, you may be referred to see an oncologist for consideration of other treatments, e.g. chemotherapy or hormonal therapy.

What is Breast Conserving Surgery?

It is an operation that removes only the cancerous lump with some surrounding breast tissue. Some lymph nodes under your arm may be removed to help determine whether you need further treatment such as chemotherapy.



Breast Conservation

After the surgery,

- There will be a scar on the breast and another scar under your arm.
- There may be one or two drains inserted near the wound to remove excess fluid.
- A small dent can be felt in the breast, but the appearance is good in most women.
- Most patients do not need to change the size of their bra, and their clothing style can remain the same.

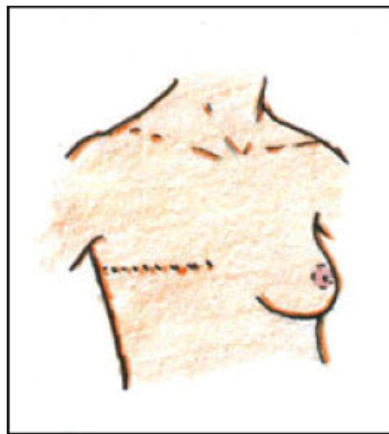
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- About 10% to 20% of the patients may require a second surgery. This occurs if the examination of the removed breast tissue shows that cancer were present at the edge of the tissue.

What is Mastectomy?

It is an operation to remove the whole breast, including the nipple. Some lymph nodes under your arm may be removed, to help determine whether you need further treatment such as chemotherapy. After the surgery, the skin will be flat on one side of the chest. There will be 2 drains inserted near the wound under the arm to remove excess fluid.



Mastectomy

For some patients, mastectomy may be the most appropriate surgery because the cancerous lump is large in proportion to the breast, or there are many areas of cancer cells present in different parts of the breast. The surgeon will explain in greater details for individuals who have this unique condition.

Some patients, depending on their conditions, who require mastectomy, may have the option of reconstructing their breast. This can be done at the same time when the breast is being removed. The reconstructed breast may be done using either an artificial implant or tissue from another part of your body. You may like to discuss this with your surgeon, or your Breast Care Nurse, and he or she can arrange for you to talk to a doctor who performs this surgery.

What is Radiotherapy?

Radiotherapy is the use of high energy radiation to kill cancer cells within the treated area. Radiotherapy is used after the surgery to destroy any remaining

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cancer cells in the breast. Your radiotherapy treatment will be daily, except for weekends and public holidays. It will last for five to six weeks. Most women find that they feel well during the radiotherapy and some continue to work full time. However, those who feel tired may need more time to rest.

Some of the common side effects may include:

- Redness or tanning of the skin that is treated.
- Breast becomes firmer.
- Increased tiredness.

These side effects are short-term. Six months to a year after the end of radiotherapy, the skin on the radiated breast usually recovers to its original appearance. However, the firmness usually persists.

What is Chemotherapy?

Chemotherapy is the use of drugs to kill cancer cells, which may have escaped from the original tumour. These drugs may be taken orally or through a needle in a vein. These drugs enter into the bloodstream, travel through the whole body and it can destroy cancer cells throughout the body. Besides destroying cancer cells, chemotherapy also affects the normal cells.

Common side effects may include:

- Hair loss
- Nausea & vomiting
- Mouth ulcer
- Anaemia
- Increased chance of developing infections

What is Hormone Therapy?

You may have hormone therapy if the cancer tumour is found to have hormone receptors for estrogen and progesterone. Hormone therapy is used to block the hormone receptors, preventing the hormones from getting to the tumours, thus stopping the growth of the tumour.

The most common form of hormonal treatment is the use of Tamoxifen. It is taken over a period of five years for it to be most effective.

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Common side effects may include:

- Hot flushes
- Indigestion
- Mild nausea

Home Advice After Surgery

How do I care for my wound?

- Keep your wound dressing clean and dry.
- Your doctor or Breast Care Nurse will check your wound in the outpatient clinic after your discharge.
- Your doctor or Breast Care Nurse will let you know when the dressing can be removed.
- See your doctor if
 - You have a fever.
 - Your wound appears red or swollen.
 - There is increasing pain over the wound area.
 - Your dressing gets stained with blood or fluid.

How do I care for my drain(s)?

- Do not disconnect the tubes.
- Avoid sudden pulling of the tubes.
- Mark on the bottle the level of fluid drained every morning. This is to monitor the amount of drainage.
- Your doctor or Breast Care Nurse will check the drain(s) in the outpatient clinic. Once the drainage is minimal, the drain(s) will be removed.



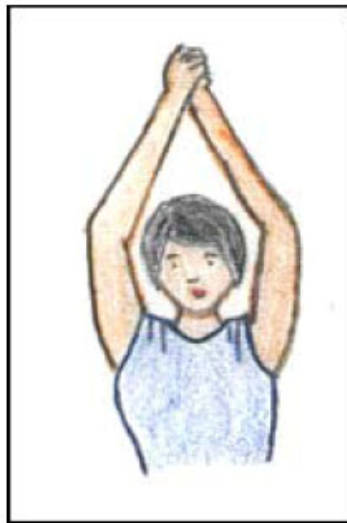
Drain

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How do I care for my arm?

- Do the exercises as instructed by your physiotherapist.
- Perform these arm exercises 3 times a day until you regain your usual arm movements.
- You can use your affected arm normally but:
 - Avoid carrying heavy objects until the wounds have completely healed
 - Take care to prevent injury on your affected arm



Arm Exercises