

## BREAST CANCER SURGERY

Neetu(name changed), a 55 year old lady was advised surgery for Breast cancer. She is very keen to preserve her breasts & is not very sure which option would be best suited to her

Vani(name changed), a 45 year old lady diagnosed with breast cancer has heard of less invasive surgical procedures for management of axillary lymph nodes (arm pit)

### What are the aims of treating breast cancer?

1. To remove cancerous area from the breast and any affected lymph nodes in the arm pit
2. Destroy any cancerous cells that might have already spread from the breast into the body through blood stream or the lymphatic system

### What are the modalities available for treating breast cancer?

There are essentially four modalities to treat breast cancer.

1. Surgery
2. Chemotherapy
3. Radiotherapy
4. Hormone therapy

It is important to remember that not all patients would require Chemotherapy, radiotherapy and Hormone therapy

### What does Surgery involve?

Surgery is usually the first treatment for most women with breast cancer. Before surgery, some women may be offered chemotherapy or hormone therapy to shrink the tumour.

Surgery involves two components

- A. Surgery to the breast
- B. Surgery to the lymph nodes in the arm pit

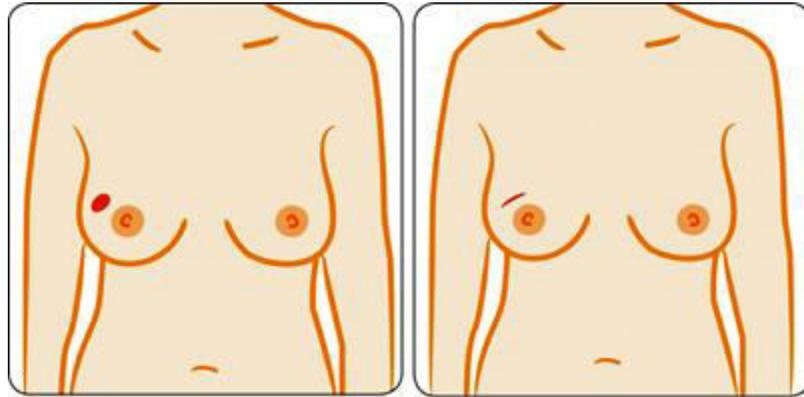
A. Surgery to the breast

There are two options

### Breast Conserving Surgery:

- This involves a wide local excision (in which the tumour is removed with a small amount of normal surrounding tissue)

### BREAST CONSERVING SURGERY - WIDE LOCAL EXCISION

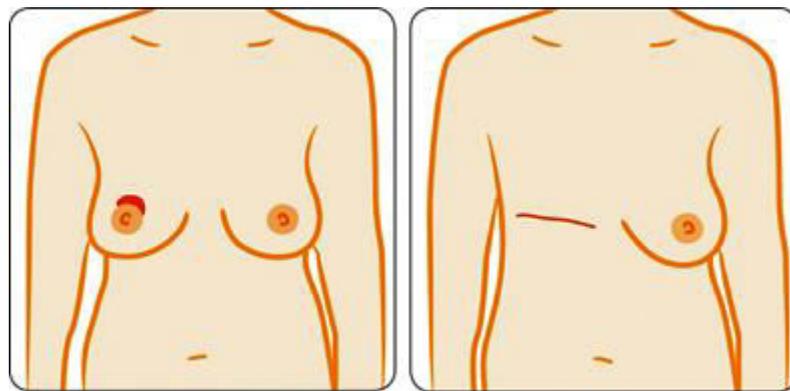


Courtesy: Breast Cancer Care, UK

### Mastectomy:

- This means that all the breast tissue is removed including the nipple

### REMOVAL OF BREAST - MASTECTOMY



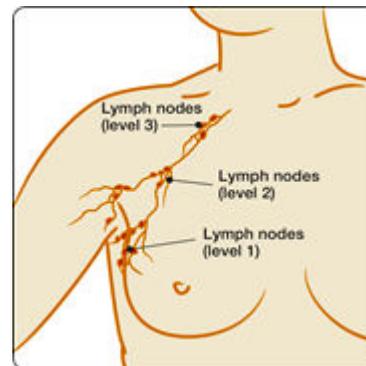
Courtesy: Breast Cancer Care, UK

### B. Surgery to the lymph nodes in the arm pit

It is important for the Specialist to know whether the cancer has spread to the lymph nodes in the arm pit because this will influence further treatment.

The options for assessing whether the cancer has spread to the lymph nodes are as follows:

### ARM - PIT AXILLARY NODES ARE ALIGNED IN THREE LEVELS

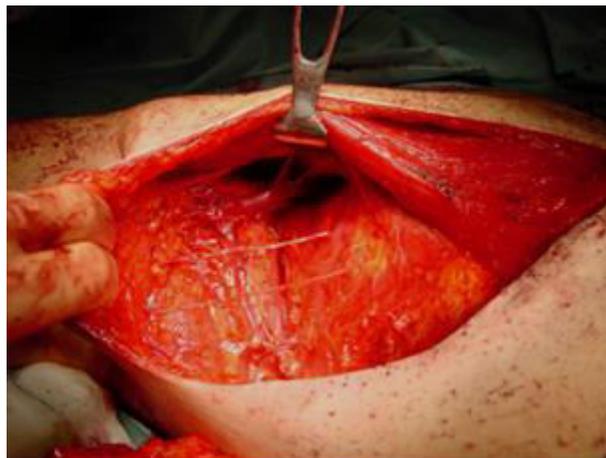


Courtesy: Breast Cancer Care, UK

#### 1. Axillary node Clearance:

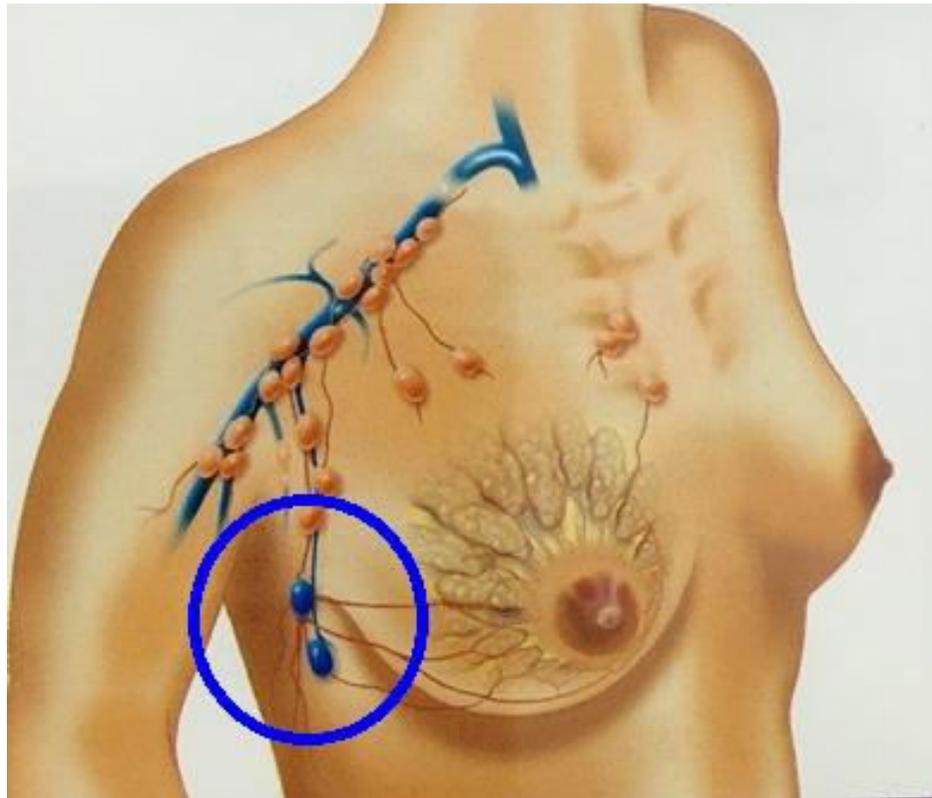
This is a standard procedure where most of the lymph nodes in the axilla (arm pit) are removed. It can cause significant morbidity and the common side effects include shoulder stiffness, numbness and pins and needles sensation in the inner part of the arm. This usually happens during the first few months after the operation. There is also a small possibility that a permanent swelling of the arm (lymphoedema) may affect about 10 – 20 in 100 women (10 – 20%).

### AXILLARY NODE CLEARANCE



#### 2. Sentinel node Biopsy (SNB):

A sentinel node/s is the first lymph node/s which drains from the area where the breast cancer has been found. A blue dye and a radioactive fluid or both are injected into or near the cancer in the breast. The dye or fluid follows the path that the tumour cells would most likely take to the lymph nodes. It is to be noted that although blue dye that is traditionally also used alongside the radioisotope to increase the accuracy in identifying the sentinel node/s, blue dye is generally NOT recommended during pregnancy.



Sentinel Nodes

The theory behind performing SNB is that if the sentinel node/s are clear of cancer cells, all other nodes in the axilla should be clear & one can avoid doing axillary node clearance, which has considerable morbidity. It is to be noted that SNB has a false negative rate of 5 - 10 %. That means that in 5 - 10 women out of 100 women, there might be disease in other nodes even though no cancer has shown up in the sentinel node/s. The risk of side effects such as arm swelling, and altered sensation in the inner aspect of the arm are less significant when compared to axillary node clearance.

If cancer cells are found in the sentinel node/s, the patient would need to have the rest of the lymph nodes removed (Axillary node clearance). It may be possible to have radiotherapy instead of second surgery. A multidisciplinary team will decide the best option.