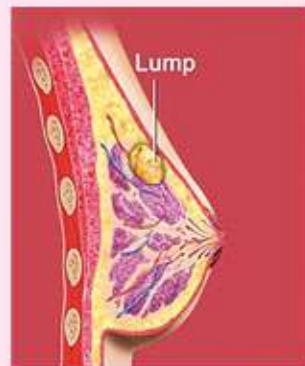




## DEPARTMENT OF BREAST DISEASES

### BREAST CANCER

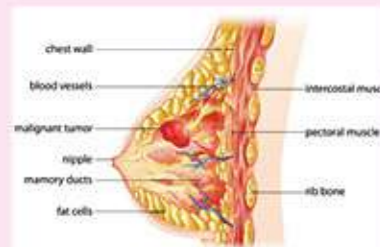
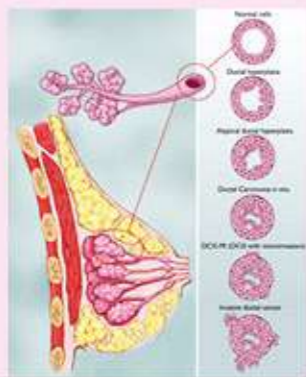
#### PATIENT INFORMATION BOOKLET



Uncontrolled division of abnormal human cells is called Cancer. These cells destroy the organ in which they arise and later spread to neighboring structures and to distant organs causing more damage. Breast consists of fat cells, milk producing glands (lobules) and tiny tubes that carry milk from the lobules to the nipple (ducts).

When the cells lining these glands and duct start growing without control it gives rise to malignant tumour of breast or Breast cancer.

In-Situ cancer means when the cancer cells are confined within ducts or lobules wall. It is the initial stages of breast cancer. Once the cells breast the lining and spread outside into surrounding breast tissue it is called invasive cancer.



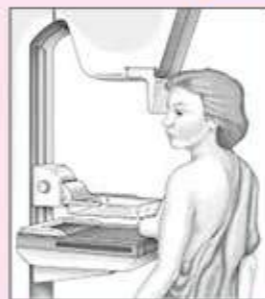
#### Signs and symptoms of breast cancer

- A lump or thickening in or near the breast or in the underarm area
- Change in the size or shape of the breast
- Blood stained, bloody, or watery nipple discharge.

- Ulcer on the breast
- Dimpling or puckering of skin overlying the breast or breast deformity.
- Itchy rash of the nipple or recent history of nipple retraction
- Scaly, red, or swollen skin on the breast, nipple, or areola

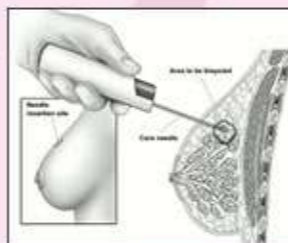
Not all breast tumors are cancerous, most lumps in young women are benign and occur because of the action of hormones on breast and most of these do not need any surgery

### DIAGNOSIS OF BREAST CANCER



Tomosynthesis or "3D" mammography is a new type of digital x-ray mammogram which creates 2D and 3D-like pictures of the breasts. This along with ultrasound improves the ability of mammography to detect early breast cancers

Core needle Biopsy is done when there is suspicious mass on mammogram, under ultrasound or mammogram guidance a thick needle is used to sample a core of tissue from the mass. This is subjected to histopathology and IHC studies which are specialized and advanced techniques to predict the tumour behaviour. This biopsy report from the pathologist is very important because it decides the sensitivity of tumor to hormones and chemotherapy and hence helps in deciding treatment protocols for that particular cancer.



MRI Breast can be done in case of further dilemma in the diagnosis and to assess the other parts of the breast as well as the opposite breast.

PET CT scan. This test is done after injecting a radioactive tracer and scanning the body to see the extent and spread of cancer in the body (i.e stage of the cancer).

### STAGES OF BREAST CANCER

#### SPREAD OF BREAST CANCER

Cancer cells spread initially to the lymph nodes in the axilla, then neck and later through lymph system to blood stream and then to distal organs

#### STAGE 0 - Cancer is in-situ



#### STAGE I

Cancer is invasive but has not spread beyond the breast



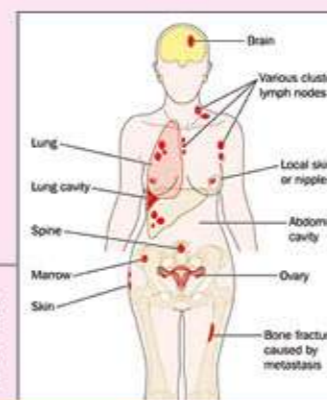
#### STAGE II

Cancer is bigger in size and involves the lymph nodes in axilla



#### STAGE III

Cancer has larger and involves breast skin, or chest wall or lymph nodes in the neck.



#### STAGE IV or METASTATIC BREAST CANCER

Cancer has spread into distant organs like lung, liver, brain, bones, ovaries, opposite breast or axilla

### TREATMENT OF BREAST CANCER

#### Chemotherapy

Here cancer cells in the breast and those which have escaped outside are destroyed with medicines. In AIMS, latest internationally approved drugs and protocols are followed. For side effects like hair loss, scalp cooling therapy is available. We also have a boutique in the breast clinic itself where you can select wigs of your choice.



#### Radiation therapy

In this therapy, high doses of radiation is used to kill cancer cells in breast and outside. In AIMS latest advances like 3D conformal RT (3DCRT) and intensity modulated RT (IMRT) are available with breath coordinated RT for better tumor targeting and lesser side effects. These techniques ensure very safe and effective radiation therapy.



#### Hormonal therapy

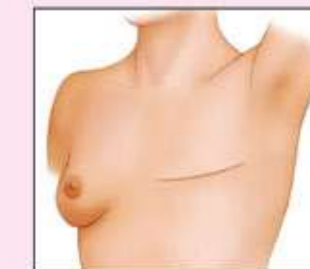
This is useful in those cancers where the tumor is hormone dependent (oestrogen and or progesterone receptor positive), and it slows the growth of breast cancer.

#### Targeted therapy

Uses drugs monoclonal antibodies (trastuzumab) or Tyrosine kinase inhibitors (Lapatinib) that block the growth of breast cancer cells in specific ways (Eg. Blocking Her-2)

### SURGERY

Surgery is the prime mode of treatment. The aim of surgery is to remove the cancer completely along with the lymph nodes in the axilla when they are affected. Surgery can be offered in different ways



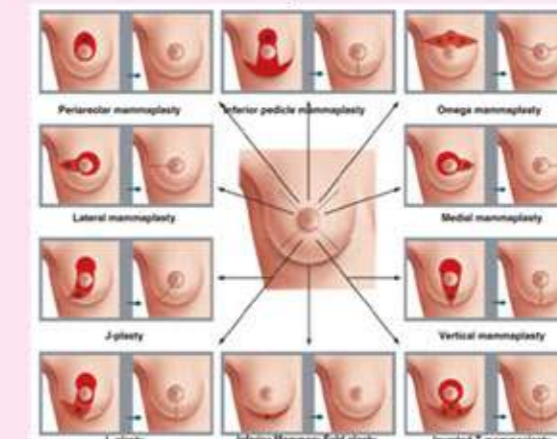
**Modified radical mastectomy** – this involves removal of complete breast with the lymph nodes in axilla. This procedure is done for large and advanced breast tumors.

**Breast conservation Therapy (BCT)** - This is the standard of care for early breast cancer which is limited to breast and axilla. Here the lump with a margin of normal breast tissue is removed and is followed by radiation to the breast to ensure completion and oncological safety.



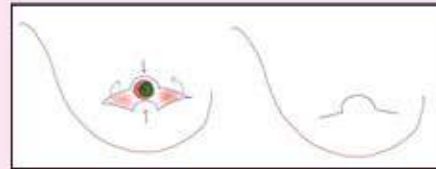
**Sentinel lymph node biopsy**- in early breast cancer where the lymph nodes are likely to be unaffected, with the help of blue dye and radiocolloid, the first draining node is removed and tested for cancer. If unaffected, the nodes of axilla are not removed thus avoiding the side effects of complete node removal.

#### Oncoplastic breast conserving surgery

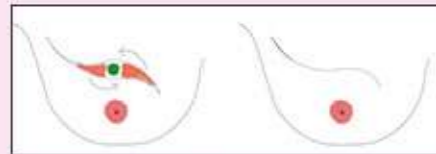


These are specialized surgical procedures which use plastic surgery techniques to remove breast tumor with a better margin and give aesthetically and cosmetically better-looking breast. These techniques are useful in tumors behind nipple and areola, in lower half of breast and large tumors where simple removal of lump will not give an aesthetic result.





Batwing mammoplasty

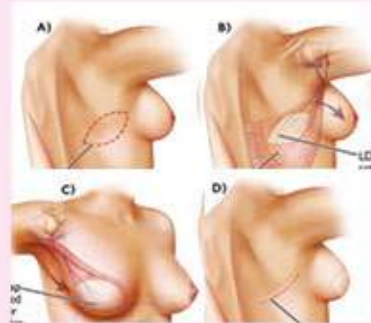


Oblique S Plasty



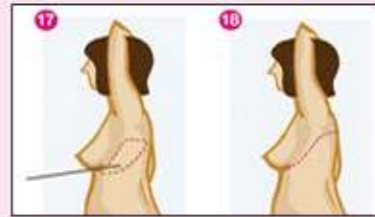
Grissoti flap

**Breast reconstruction surgery** - In large tumors where breast conservation is not feasible, breast can be reconstructed with skin from the back or abdomen (autologous flaps) or with artificial implants. This can be done at the time of surgery, or later after treatment is completed (Secondary reconstruction).

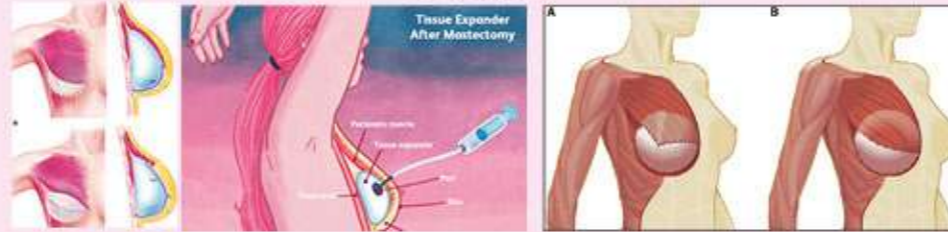


LD Flap

Reduction mammoplasty or breast size reduction is also offered at our center to women with heavy, large breasts who would like to reduce the size of their breasts to increase their comfort. We also offer hidden scar breast lump removal for young girls with benign lumps.



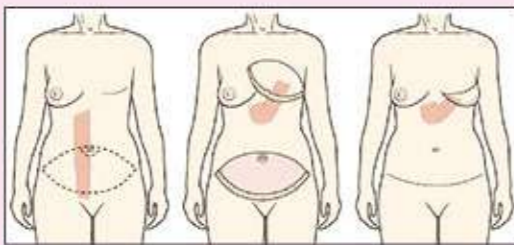
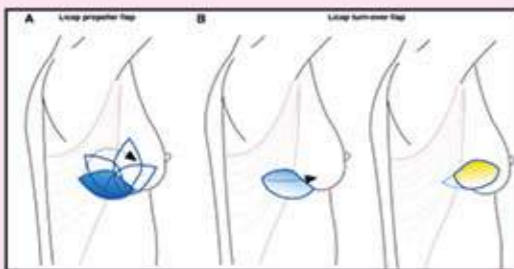
IMPLANTS



BREAST CANCER - MYTHS & FACTS

- **Breast cancer is a life - threatening disease. FALSE.** Early breast cancer has 99% survival and cancer which is stage 2 or 3 has up to 86% 5-year survival. So early detected cancer can be cured.
- **Mammogram is very painful. FALSE.** Mammogram may be a little uncomfortable but with advanced techniques it is not at all painful.
- **Breast removal or mastectomy is better than breast conservation. FALSE.** In early breast cancer there is no difference in survival whether breast is removed or saved. That means by removing the complete breast there is no extra safety or guarantee of survival.
- **If breast is preserved there is a risk of cancer coming back in breast or opposite breast. FALSE.** If the cancer is removed with a margin of normal breast tissue all around and radiation is given the chances of cancer coming back in breast are very low.
- **Breast removal gives peace of mind. FALSE.** Removal of breast creates loss of body image and confidence. As after completion of treatment loss of breast is the only reminder of cancer. Other side effects all go away. Research has shown than patients with breast preserved after cancer treatment are much happier.

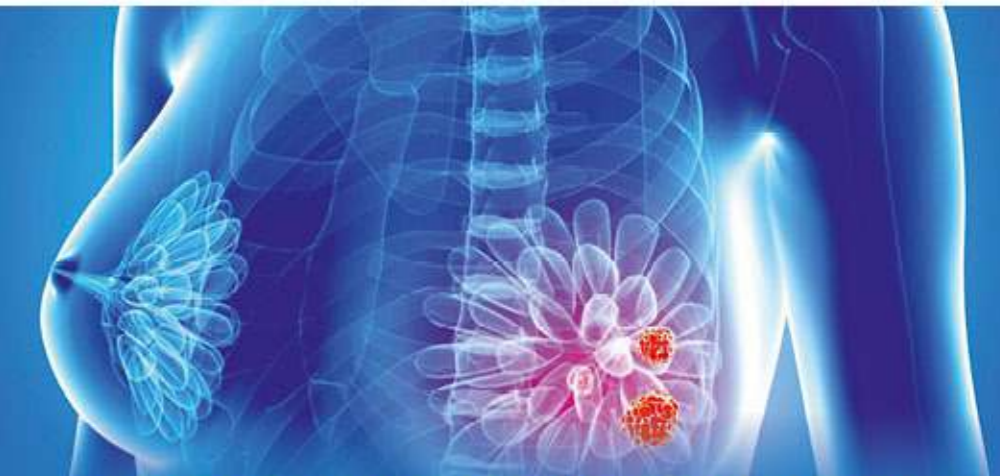
**Perforator flap reconstruction** - After removal of the tumor, skin in the armpit and around the breast, is used to fill the defect in the breast for good shape.



TRAM Flap

- **Radiation is very toxic and had very bad side effects. FALSE.** With modern technology radiation is very focused on tumor bed and side effects are very minimal.
- **Breast preservation is risky for life. FALSE.** New research has shown that breast preservation has better long term and cancer free survival. This means that in selected cases of early breast cancer (Stage I and II), preservation of breast has better long term survival along with good breast cosmesis (Ref).
- **Breast conservation surgery is a big surgery with complications. FALSE.** Breast conservation surgeries with simple techniques are smaller surgeries with a faster recovery period and lesser complications than mastectomy.
- **Complete removal of breast is a guarantee that breast cancer will not come back. FALSE.** Cure from cancer is not dependent on breast removal or preservation in early breast cancer. It depends on tumour aggressiveness and additional chemotherapy, radiotherapy and hormone therapy. Cancer usually comes elsewhere in body and chances of survival are same whether breast is removed or preserved. Locally cancer can come in left over breast tissue also even after mastectomy.

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Complete and comprehensive care for all breast related problems for all age groups

WE OFFER

- Hidden scar surgeries for breast
- Cosmetic procedures - Breast augmentation and breast reduction
- Breast conservation surgeries
- Oncoplastic breast surgeries
- Reconstruction with breast implant
- Immediate and delayed breast reconstruction
- Skin and nipple sparing mastectomies
- Excision of non palpable lesions with wire localisation
- Sentinel node biopsy



Breast cancer need not mean breast removal



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