International Research Journal of Education and Technology
ISSN 2581-7795

BREAST CANCER: DIAGNOSIS AND TREATMENT

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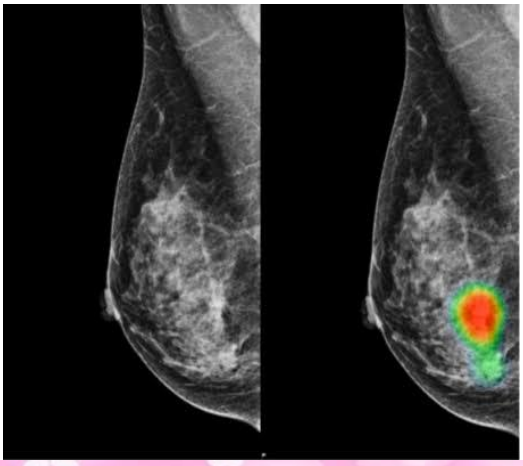
ABSTRACT:

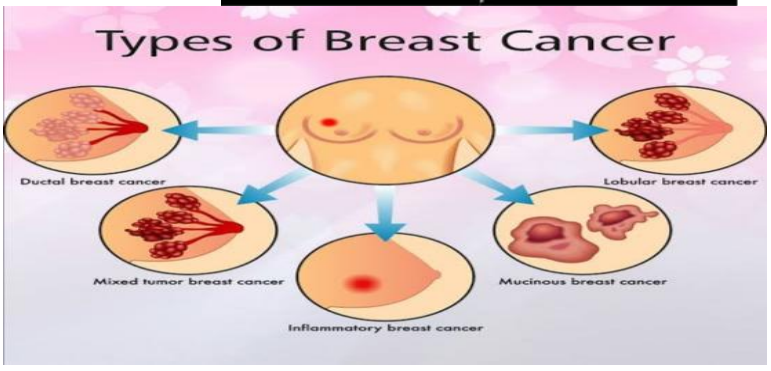
Breast cancer is a disease which forms in the cell of the breasts. It is can occur meanly in women and rarely in men. The breast cancer meanly develops from the breast tissue. 270 number of breast cancer cases diagnosis annually, 99% survival rate for stage 1 breast cancer, 62% diagnosis at an early stages, 3.5 million number of breast cancer survivors in the U.S, and the age between 40-45 years old women should being annual screening. The sign may include a lump in the breast and change the breast shape, dimpling of the skin, automatically fluid coming from the nipple. Breast cancers is meanly happened for the milk-producing ducts. In a research it is identify that hormonal, life style and environmental factors increase the risk of breast cancer. Diagnosis of breast cancer meanly involved three steps a) Breast self-examination b) Cytological analysis c) Mammograph. The common treatment of breast cancer is a) Surgery b) Medication c) Radiation d) Complementary. The further discussion is types of cancer, sing and symptoms, diagnosis, management and controlled will be carried out below.

Keywords: Breast cancer,Cancer.

INTRODUCTION:

When a malignant tumor originated to the breast than breast cancer occurs. The cancer spread other part of the body when the breast cancer tumors is mature. The primary root of metastasis is the lymphatic system which, ironically enough, is also the body primary system for producing and transporting white blood cells and other cancer-fighting immune system cells throughout the body[1,2,3]. Metastasized cancer cells move through the lymphatic systems white blood cells move through the lymphatic vessels and settle in remote body location, forming new tumors and perpetuating the disease process. The breast cancer spreads by a) lymph nodes under the arm. b) lymph nodes around the collar bone and infraclavicular. c) lymph nodes inside the chest near breast bone. Breast cancer is not just a woman's disease[4,5]. It is quite possible for men to get breast cancer, although it occurs less frequently in men than in woman[6].





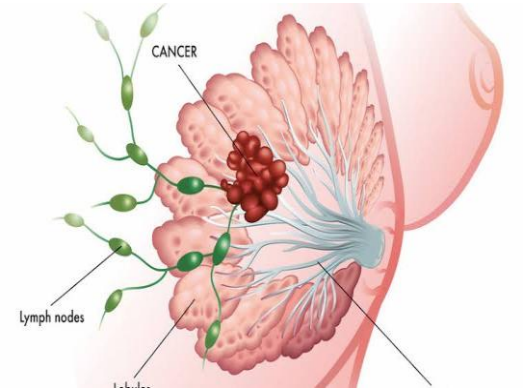
TYPES OF BREAST CANCER:

- Ductal Carcinoma In Situ.
- Invasive Ductal Carcinoma.
- Invasive Lobular Carcinoma.
- Inflammatory Breast Cancer.
- Labour carcinoma in Situ.
- Male Breast Cancer.
- Molecular Subtypes of Breast cancer.
- Triple-Negative Breast Cancer.

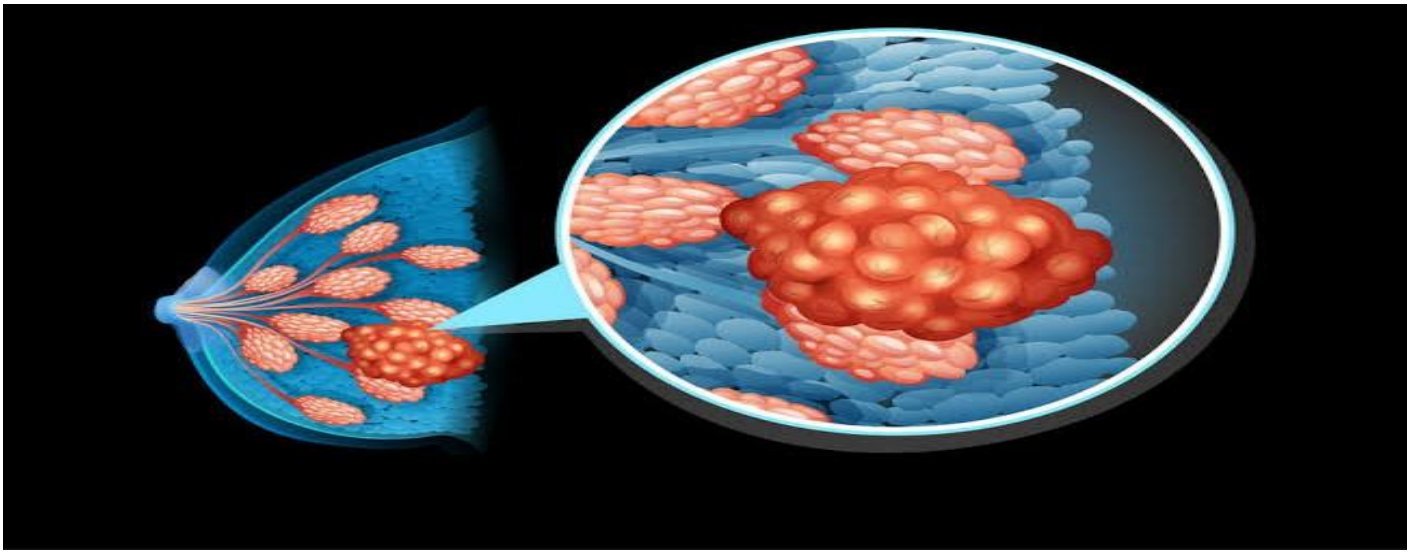
- Paget's Disease of the Nipple.
- Phyllodes Tumors of the Breast.
- Recurrent Breast Cancer.
- Metastatic Breast Cancer.

SINGS AND SYMPTOMS OF BREAST CENCER:

1. Constant breast or nipple pain.
2. Nipple is inverted.
3. A new lump or thickening in the breast or armpit area.
4. Nipple change in a newly invert or retracted.
5. A change in the colour of the breast area or nipple.
6. A change in the breast shape or size.
7. A discharges from nipple that occurs without squeezing.
8. Lump or thickening in breast or underarm.
9. Swelling of all or parts breast area.
10. Unusual discharge from nipple.



DIAGNOSIS OF BREAST CANCER



MAMMOGRAM;
It is an X-ray of the breast. Mammogram is normally used to screen for breast cancer if any abnormality is detected on a screening mammogram[7].

BREAST EXAM;

Check both breast and lymph nodes for any lumps or other abnormalities.

BREAST ULTRASOUND;

Ultrasound uses sound waves to produce image of structures deep within the body. Ultrasound may be used to determine where a new breast lump is a solid mass or a fluid- filled cyst.

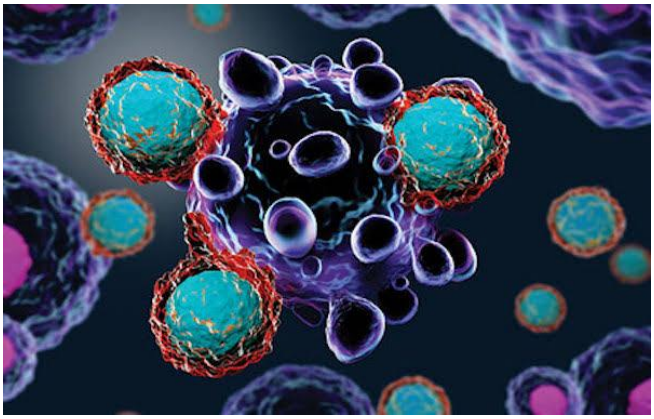
REMOVING A SAMPLE OF BREAST CELLS FOR TESTING (BIOPSY);

Biopsy is the only definitive way to make a diagnosis of breast cancer. A specialized needle device guided by X-ray or another imaging test to extra and core of the tissue from the suspicious area. A small metal marker is left a at the site within the breast so the area can be easily identified on future imaging testes[8,9,10].

BREAST MAGNETIC RESONANCE IMMAGING (MRI);

MRI machine uses a magnet and radio waves to create to create pictures of the interior of the breast. Before a breast MRI, the patient received an injection of dye. An MRI dose not use radiation to create the image[11].

TREATMENT OF BREAST CANCER:



SURGERY;

Surgery of the breast cancer is meanly two types;

a) Lumpectomy; In lumpectomy a small amount of surrounding normal tissue is removed[12].
b) Quadrantectomy; In quadrantectomy one fourth of breast is removed. In mastectomy all breast tissue is removed[13].

RADIATION THERAPY;

In radiation therapy high energy X-ray or gamma rays that target a tumor or post surgery tumor side. The radiation are very effective to killing the tumor cell. Radiation therapy for breast cancer is usually performed after surgery and integral component of breast-conserving therapy[14,15].

CHEMOTHERAPY;

Chemotherapy is manly use to treatment the cancerous cells. Specific treatment for breast cencer is based on overall health, medical history, age, type and stage of the cancer, tolerance for specific medications and procedure etc. Chemotherapy can be given before surgery to shrink the tumor and some times make breast conserving surgery possible rather then a mastectomy[16,17].

NANOTECHNOLOGY IN BREAST CANCER;

Nanotechnology is rapidly evolved. More than 150 ongoing clinical trials investigating the efficacy of nanotechnology based drug delivery carriers targeting center.

For example, the efficacy of three liposomal doxorubicins are currently being used; liposomal daunorubicin, liposomal doxorubicin[17,18].

GENE THERAPY;

A various variety of gene therapy strategies have been developed as potential new therapy strategies have been developed as potential new therapies for cancer[19].

ONCOGENES INACTIVATION;

It is meanly applied in clinical trials. Transcription of oncogenes also can be inhibited by using adenoviral gene E1A,which interfere with the transcription of erbB, this oncogenic protein are useful for treating for breast cancer[11,12].

AUGMENTATION OF TUMOR SUPPRESSER GENES;

Over then 25 suppresser genes have been identified, the genes are associated with various of neoplastic condition. Clinical trials are under way to deliver p53 using adenoviral vectors to a variety of cancer[20].

CELL-TARGET SUICIDE;

It can be achieved by the expression of a gene that confers a dominant, negatively selectable phenotype to the cancer cell such as cell death imparted by expression of pro drug metabolism enzyme[20,21].

CHEMOPROTECTION APPROACH;

The MDR-1 gene encoding the multidrug therapy transporter protein has received much attention in this regard. And the transmembrane protein transports a wide variety of chemotherapeutic agents and other drug out of cells, thus protecting them from the agent's toxic effect[21,22].

PREVENTION OF BREAST CANCER:

GET A MAMMOGRAM;

Mammogram is an important part of our health history. These include starting at age of 50 and having them every two years.

EXAMINE YOUR BREASTS EACH MONTH AFTER AGE 20;

Familiar with the contours and feel of your breasts and will be more alert to changes[23].

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