History Of Breast Cancer

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The history of breast cancer dates back to the early Egyptian period. The number of breast cancer-affected females is rising every year. In 2008, it was observed that the number of females suffering from breast cancer rose to 1.38 billion all over the world. The early medical literature describes no possible treatment for breast cancer. William Stewart Halsted experimented with the process of mastectomy by the surgery of breasts; in the process, both lymph nodes along with the associated breasts are removed. The process is painful, but it prevents breast tumors from growing again. (Welsh et al., 2015). The number of breast cancer patients is increasing all over the world, but the number has risen drastically in South Asia. A survey indicates that in 2015, the number of women who have breast cancer was found to be 2, 50,000 with a 3% annual increase expected every year (Torre et al., 2015).

Types

There are five types of breast cancer discovered until now:

- Ductal carcinoma: In this type of cancer, mutation develops in the lining of milk ducts in the breasts. The mutation, however, does not spread to the breast tissue outside the dust. This type of cancer, if diagnosed early, can be treated before it spreads to the surrounding breast tissue.
- Invasive Ductal Carcinoma: This type of breast cancer is the most commonly found, comprising almost 80% of all breast cancer patients who have this type of mutation. In this type of cancer, the mutation spreads to the breast tissue. The invasive abnormal cells can also spread to other parts of the body, and therefore, their treatment becomes extremely difficult.
- Inflammatory Breast Cancer: This is a rare type of breast cancer in which the mutation spreads to the lymph nodes and skin of the breast. Its symptoms appear when lymph vessels are completely blocked by cell mutation.
- Phyllodes tumor: This type of cancer is also rare. It affects the nipple area of the breast. This type of cancer is normally accompanied by other major types of breast cancers.

Symptoms

Patients who have a history of breast cancer should carefully monitor their breast health as this disease is more common among people with cancer than their ancestors. The self-physical exam of breasts can be done by the presence of any lump or smudge in the breast or armpit area. In case of any lump, the person should immediately refer to a physician for an advanced checkup. Breast cancer can be detected by the following symptoms:

- Any swelling in the breast area, increase in size, shape, or orientation of the breasts.
- Skin irritation in the breast area, rough or irregular skin, or nipple and breast.
- Pain in the breasts or nipples.
- Nipple retraction is the inward turning of nipples.
- Any discharge from the nipples other than breast milk.
- Lump in the breast or armpit area.
- Color change, redness, dark spots, or thickening of breast skin.

Diagnosis

There are several types of diagnosis methods for breast cancer that can detect the presence of a mutation in the early stages before cancer spreads in the body.

- Breast exam: in this test, both the breasts and armpit area are physically examined for any lump or skin change.
- Mammogram: this test is done by X-ray analysis of the breasts. Any abnormality in the screening process is detected by the dark area in the X-ray exam; it can also suggest the location of the tumor and its development stage.
- Imaging tests: radio and X-ray imagery tests can be conducted to find the presence of a tumor. These processes include diagnostic mammography, Ultrasound, and MRI.
- Biopsy: This type of examination is done by removing a small tissue from the breast area and analyzing it with pathologists who are experts in the diagnosis. A biopsy can be of different types depending upon the stage of breast cancer: lymph node biopsy for lymph node mutation expectation, Image-guided biopsy done with the help of an imaging test, and surgical biopsy in which large tissue is removed and analyzed for mutation behavior.

Progression

The breast cancer progression can be described by the following stages:

- Stage 0: there is no evidence of cancer cells or abnormal breakdown.
- Stage 1: the mutation has just taken place, and abnormal cells are confined to a small area.
- Stage 2A and 2B: In stage 2A, no existence of a tumor is seen, but lymph nodes are found to develop some mutation. In stage 2B, a tumor is developed up to 5 mm in size but has not spread to auxiliary lymph nodes.
- Stage 3A, B, C: in stage 3A mutation is found in up to 4 to 9 lymph nodes, in 3B it may increase to more modes and tumor size increases, while in 3C cancer spreads to 10 or more lymph nodes and cancer may be visible under collarbone or skin in that area.
- Stage 4: the cancer is fully developed and enters the invasive phase.

Therapy

Breast cancer is treated if detected in its early stages by the following methods:

Surgery: The breast tissues are removed with the lymph nodes and connected tissues by a surgical process called mastectomy.

Lymph node biopsy: In this process, a small number of lymph nodes are removed, which is helpful in the early stages.

Chemotherapy: In this treatment, medicines like anthracyclines and cyclophosphamide are used to treat a tumor. This method is only possible if cancer is detected in its early stages.

Radiation therapy: This method of treatment uses X-rays to kill cancer cells. A targeted beam of X-ray and, in some cases, internal radiation is done to treat mutation.

Hospitals For Breast Cancer Treatment

The following hospitals are the best in America for breast cancer treatment:

- Massachusetts General Hospital, Boston
- Northwestern Memorial Hospital, Chicago
- UCLA Medical Center, Los Angeles
- University of North Carolina Hospitals, Chapel Hill
- University of Texas MD Anderson Cancer Center, Houston
- Wake Forest Baptist Medical Center, Winston-Salem, North Carolina

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