



Case Report

Male Breast Cancer - A Case Report

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Abstract

Male breast cancer is a rare cancer that forms in the breast tissue of men. Though breast cancer is most commonly thought of as a disease that affects women, it does occur in men. Male breast cancer is most common in older men, in between ages 60 and 70, though it can rarely occur under age 35. Common predisposing causes that raise odds for male breast cancer includes-breast cancer in a first degree relatives, history of radiation exposure to chest, enlarged breast (gynaecomastia) because of excess endogenous or exogenous estrogens, obesity, mutation of BRCA2 gene (common), cirrhosis of liver, history of some drugs intake, alcoholism, klinefelter's syndrome, diseases of the testicles such as mumps orchitis or orchidectomy, prostate cancer or may be idiopathic. Here we present a case of older aged man who reported with a lump and itching of the left breast for one year in OPD of a general clinic in Munshigonj. The patient was referred to the unit-I, department of surgery, Sir Salimullah Medical College Mitford Hospital where clinical diagnosis was carcinoma of left breast.

Introduction

Male breast cancer is a rare cancer that forms in the breast tissue of men. Though breast cancer is most commonly thought of as a disease that affects women, it does occur in men. Male breast cancer is most common in older men, in between ages 60 and 70, though it can rarely occur under age 35. Common predisposing causes that raise odds for male breast cancer includes: - breast cancer in a first degree relatives, history of radiation exposure to chest, enlarged breast (gynaecomastia), because of excess endogenous or exogenous estrogens, obesity, mutation of BRCA2 gene (common), cirrhosis of liver, history of some drugs intake, alcoholism, klinefelter's syndrome, diseases of the testicles such as mumps orchitis or orchidectomy, prostate cancer or may be idiopathic.

Case Report

A case of older aged man of 64 years, reported with lump and itching of the left breast for one

year, in OPD of a general clinic in Munshigonj. Our patient has not given history of radiation exposure to chest, exogenous estrogen intake, enlarged breast, jaundice, mumps orchitis or testicular trauma or surgery. One our general survey there is no jaundice, anaemia, vital signs are within normal limit, no axillary or supraclavicular lymphadenopathy; no cough, haemoptysis, bone pain. Other systemic examination reveals normal. On local examination, a lump in the left breast which is painless, hard in consistency, irregular surface; itching also present. The overlying skin is pockered, scaling with dimpling, the lump is free from underlying structures. Nipple is changed as scaling but no discharge, or ulceration. The opposite breast is healthy. All routine hematological tests and chest x-ray report are within normal limit.

My patient was referred to the unit-I, department of surgery, SSMC Mitford Hospital where clinical

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Fig.-1: Male breast cancer- After operation



Before operation

examination was done and diagnosed as: left sided male breast carcinoma with stage II: T₂N₀M₀. Then FNAC and other necessary investigations were done and confirmed as a case of left sided invasive ductal carcinoma. High resolution USG of both axilla revealed no axillary lymph-adenopathy.

After preparing the patient, simple mastectomy was done under general anaesthesia in GOT. Postoperative period was uneventful: specimen sent for histogenesis and it revealed invasive ductal adenocarcinoma with tumour free margin.

On follow up, patient was advised adjuvant chemotherapy & hormone, immunotherapy and referred to NICHR, for further oncological management. Thereafter, the patient was follow up 3 monthly for one year with proper history & some relevant investigations in SOPD of SSMC Mitford Hospital and he is well, with no locoregional recurrence or systemic symptoms.

Pathophysiology (When breast cancer begins in men):

Everyone is born with a small quantity of breast tissue. Breast tissue consist of milk producing glands (lobules), lactiferous ducts & fat. During puberty women begin developing more breast tissue and men do not: but because men are born with small amount of breast tissue they can develop breast cancer. Cancer of the male breast accounts for less than 0.5% of all cases of male breast cancer. The most breast cancers in men are carcinoma. The most common type of breast carcinoma is : invasive (or infiltrating) ductal carcinoma – starts in a milk

duct of the breast, breaks through the wall of the duct and grows into fatty tissue of breast. The other type is: infiltrative (invasive) lobular carcinoma which starts in the milk-producing glands (lobules).

Discussion

Male breast cancer is a rare cancer that forms in the breast tissue of men. Though breast cancer is most commonly thought of as a disease that affects women, it does occur in men. Breast cancer normally grow and divide in response to female hormone such as estrogen. The more cells are divide, the more changes there are for mistakes to be made when they are copying their DNA. These DNA changes can eventually lead to cancer. Factors that unbalance the level of female and male hormones in the body can so, have an effect on breast cancer. Men with inherited mutation in the BRCA1 & BRCA2 genes have a higher life time risk for breast cancer, and possibly some other cancer such as prostate & pancreatic cancer. All men to have been diagnosed with breast cancer should consider **Genetic Testing** because they can be at risk for other cancers, such as prostate and pancreatic cancer. Mutation in CHEK2, PTEN and PALB2 genes might also be considered for some breast cancer in men.

Men commonly ER positive tumors- so adjuvant systemic chemotherapy, hormone, immune therapy is used. If ER,PR, HER2 receptor are negative, then it is called **Triple Negative Breast Cancer** wher hormone therapy is less effective. Breast cancer in men is frequently a disseminated

systemic disease- so, endocrine therapy that is Tamoxifen 20 mg once daily is the treatment of choice. Tumour regression in men is double by Tamoxifen then in female.

Generally poorer prognosis in male breast cancer than in female in any stage of disease. Overall 5 years survival rate for men with breast cancer is 84%. Individual survival rate depends on different factors, including stage of the disease when it is first diagnose. If the cancer is located only in the breast, the 5 years survival rate is 97%. Female breast cancer is 100 times more common than men.

Conclusion

Male breast cancer is a rare cancer that forms in the breast tissue of men. It is rare in male (0.5%); increased in incidence in male breast cancer with prostate cancer; as in women hormonal influences are probably related to development of male breast cancer. A high incidence of both breast cancer and gynaecomastia in Bantu men due to a failure of estrogen inactivation (metabolism) by a liver damaged by associated liver disease.

Most breast carcinoma in stage I and II requires simple mastectomy with axillary sampling or sentinel lymphnode biopsy(SLNB) for suspicious axillary lymphnode; *breast conserving surgery* is also a good option in this stage; where ,lump is <4 cm, low ratio of breast tissue Vs lump size and facility of postoperative radiotherapy is available. Postoperative chemotherapy, hormone therapy or/ and biological or targeted therapy are needed according to ER,PR, HER2 & VEGF receptor status.

Male breast cancer is though a rare encountered in daily practice of a general surgeon; proper history, systemic evaluation and multidisciplinary team approach is imperative.

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