

A Rare Case of Long Term Survival in Male Breast Cancer Patient

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ABSTRACT

Male breast cancer is rare. It accounts for 0.2% of all cancers and 1% of all breast cancers. Most patients present with advanced stage and studies indicate overall survival ranging from 6 months to 3 years. Here we report a case of bilateral male breast cancer who has survived more than 25 years posttreatment.

Key words: Clinical presentation; diagnostic and therapeutic modalities; male breast cancer

Introduction

Breast cancer in the male is a rare tumor.^[1] It accounts for <0.1% of male cancer worldwide and usually presents late in life at a more advanced stage.^[2]

Male breast cancers account for approximately 1% of all breast cancers diagnosed in the United States each year.^[3] However, male breast cancer have been found in higher proportion in black Africans, which was attributed to hyperestrogenism, secondary to endemic liver infection in Africa.^[4] Male breast cancer accounts for 9% of all breast cancers in Zaria,^[5] and 8.6% from Jos, and 8% from Eastern Nigeria, respectively.^[4] The peak incidence of occurrence was between 60 and 69 years with a mean of 60.5 years.^[4] Of the 209,060 total cases of breast cancer expected in the United States in 2010, 1970 (0.94%) will occur in men and 390 men are expected to die from the disease.^[6] Previous report from Nigeria indicates overall survival ranging from 6 months to 3 years.^[5]

Case Report

A 45-year-old man, banker who presented in June, 1989 (25 years ago) with a history of left breast lump, nipple

discharge, and histological diagnosis of invasive ductal carcinoma, post simple mastectomy. Physical examination revealed a middle-aged man, not pale, anicteric acynosed, and no pedal edema. There was no area of recurrence on the left chest wall. Right breast, both axillae and supraclavicular fossa were free. Other systems were also normal. Investigations done were all normal (full blood count, chest X-ray, abdominopelvic urinary sensation scale, electrolyte urea and creatinine, and retroviral screening).

He was commenced on chemotherapy; intravenous (I.V) cyclophosphamide 1 g, I.V methotrexate 40 mg, I.V 5-fluorouracil 1 g every 3 weeks for 6 courses. He also had external beam irradiation to the left chest wall (tangential) 50 Gy in 25 fractions over 5 weeks. He was on hormonal therapy (tablet tamoxifen 20 mg daily) for 5 years. Patient was regular on follow-up (initially 6 weeks, 3 monthly, 6 monthly then later annually) with no disease recurrence (evidenced by radiological investigations and blood profile during each visit) until October, 2010 (21 years after diagnosis) when he presented with a history of right breast lump and nipple discharge of 3 months. He had a simple mastectomy of the right breast, and a histological diagnosis of mucinous carcinoma was made. He had external

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beam irradiation of the right chest wall 45 Gy in 12 fractions over 4 weeks and 10 Gy in 3 fractions as scar boost.

A year later, patient diagnosed to have diabetic mellitus and was commenced on glibenclamide and glucophage. Patient was seen on December 3, 2013 on follow-up with chest X-ray, which revealed pulmonary metastases (Conon ball metastatic deposit). He was commenced on second line chemotherapy; I.V epirubicin 50 mg, I.V cyclophosphamide 1 g, and I.V taxotere 80 mg every 3 weeks, which he completed on February 24, 2014. The patient was also placed on tamoxifen 20 mg daily.

Patient was seen on April 16, 2014 with 2 weeks history of back pain, in which spinal X-ray revealed sclerotic lesion in the T4-T11 vertebral bodies and lumbar spondylosis. He then had external beam irradiation to the thoracic spine (T3-T12) 10 Gy in 2 fractions over 3 days which he completed on May 27, 2014 and was asked to be seen in clinic in 6 weeks on follow-up review.

Discussion

Male breast cancer is an uncommon disease accounting for approximately 1% of all breast cancers diagnosed in the United States each year.^[3] However, it has been found in higher proportion in black Africans.^[4] Factors such as alteration of hormonal milieu, family history, and genetic alteration are known to affect the occurrence of male breast cancer.^[7] In this patient, there was no family history of breast cancer and other factors were not investigated in the patient.

This patient presented at an early stage, which accounted for his long survival contrary to previous studies in which majority of the patients present late, accounting for the known poor prognosis. The risk of subsequent contralateral breast cancer was higher for men aged <50 years at the time of the first cancer diagnosis,^[8] which is similar in this patient.

The patient presented early with no evidence of skin or pectoral fascia involvement. A known presentation in most male breast cancer is an early involvement of the surrounding fascia and underlying muscles because of the small size of the male breast.^[4] Patient received prompt and standard treatments consisting of modified radical mastectomy, adjuvant chemotherapy, radiotherapy, and hormonal treatment for 5 years which is the standard recommended therapy. Administration of standard therapy has been associated with good survival in male breast cancer.^[5] The estrogen receptor (ER) positive status of the patient was not done because of lack of facility at the time of initial presentation 25 years ago. Most males are ER positive with good response to hormonal therapy, which the index patient received for 5 years.^[9] All the above factors may have contributed to the long survival in the patient.

Exceptionally, this patient survived for 25 years, which was far beyond previous reports from Nigeria. Ahmed *et al.* in Zaria reported the 5-year survival rate was 50% for stage II disease and 20.8% for the advanced disease of male breast cancer.^[5] Another study from Nigeria indicates overall survival ranging from 6 months to 3 years.^[5] In the study from LAUTECH, 57% of patients died from 1-week to 7 months after diagnosis while an overall 3 years survival of 27.2% was reported from Enugu.^[4] In high-income countries, the 5 years overall survival rates for all stage of breast cancer in men range from 36% to 66% and 10 years survival rates range from 17% to 52%.^[6]

Conclusion

Male breast cancer is rare, accounting for 0.2% of all cancers and 1% of all breast cancers. Most patients present with advanced stage and studies indicate overall survival ranging from 6 months to 3 years. Herewith, we reported a case of bilateral male breast cancer who has survived 25 years posttreatment; exceptionally because of early, prompt, and standard treatments.

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Conflicts of interest

There are no conflicts of interest.

References

1. Gu GL, Wang SL, Wei XM, Ren L, Zou FX. Axillary metastasis as the first manifestation of male breast cancer: A case report. *Cases J* 2008;1:285.
2. Saru EA, Mudarris F, Amr SS. Male breast cancer – Case report and brief review. *Middle East J Fam Med* 2004;6(6):1-2. Available from: <http://www.researchgate.net>. [Last cited on 2014 Jun 05].
3. Contractor KB, Kaur K, Rodrigues GS, Kulkarni DM, Singhal H. Male breast cancer: Is the scenario changing. *World J Surg Oncol* 2008;6:58.
4. Ezeome ER, Emegoakor CD, Chianakwana GU, Anyanwu S. The pattern of male breast cancer in eastern Nigeria: A 12 year review. *Niger Med J* 2010;51:26.
5. Ahmed A, Ukwenya Y, Abdullahi A, Muhammad I. Management and outcomes of male breast cancer in zaria, Nigeria. *Int J Breast Cancer* 2012;2012:845143.
6. Jemal A, Siegel R, Xu J, Ward E. Cancer statistics, 2010. *CA Cancer J Clin* 2010;60:277-300.
7. Ballerini P, Recchione C, Cavalleri A, Moneta R, Saccozzi R, Secreto G. Hormones in male breast cancer. *Tumori* 1990;76:26-8.
8. Madeira M, Mattar A, Passos RJ, Mora CD, Mamede LH, Kishino VH, *et al.* A case report of male breast cancer in a very young patient: What is changing? *World J Surg Oncol* 2011;9:16.
9. Giordano SH, Cohen DS, Buzdar AU, Perkins G, Hortobagyi GN. Breast carcinoma in men: A population-based study. *Cancer* 2004;101:51-7.