

MALE BREAST CANCER IN NORTH EASTERN NIGERIA.

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ABSTRACT:

Background: Carcinoma of the male breast is generally rare and constitutes 1% of all breast cancers. They often present late in developing countries and therefore has poor prognosis. The aim of this paper is to highlight the pattern of presentation and problems associated with management of this disease in Maiduguri, North Eastern Nigeria.

Patients And Method: Case records of eleven (11) histologically diagnosed male breast cancers out of a total of two hundred and ninety-five (295) cases of breast cancer managed at the University of Maiduguri Teaching Hospital between 1989-2003 were retrospectively studied and analysed.

Results: Male breast cancer constitutes 3.7% of all cases of breast cancers seen in this hospital during the study period under review. The male to female ratio was 1:26. The peak age range at presentation was 40-49 years and all were advanced at presentation. The time interval between onset of symptoms and presentation were all over 12 months. All the patients either had toilet mastectomy or modified radical mastectomy. In addition, two patients had sub capsular orchidectomy while nine had Tamoxifen. Four patients had additional cytotoxic chemotherapy. Two patients died in the course of follow-up while the rest were lost to follow-up shortly after discharge. Only one patient was followed-up for more than two years.

Conclusion: Male breast cancer though rare, is a serious clinical problem associated with late presentation. It is hoped that increased public awareness will improve the outcome of management.

Key words: Male, Breast Cancer, Northeastern Nigeria.

INTRODUCTION:

Carcinoma of the male breast is generally rare¹⁻³, it accounts for about 1% of breast cancer in the United States. It however appears to be more common in Africans with an incidence of about 6% in Egypt⁴ and Tanzania⁵. In Nigeria, the incidence ranges from 3.4% in Ibadan⁶ to as high as 8% in Enugu⁷ and 9% in Zaria⁸. Male breast cancer seems to have a strong familial tendency⁹. There is also an increased risk in patients with Klinefelters syndrome, those on hormonal treatment for prostate cancers, Gynaecomastia, alcohol, obesity, chronic Liver diseases and childlessness^{10 - 12}. Though clinically male breast cancer resembles those seen in women, they usually present late with advanced disease, often with metastases. The treatment therefore usually requires multiple approaches, usually starting with surgical removal of the tumor especially in

localized disease. Other modalities often include The prognosis however is generally poor due to the late presentation. The aim of this study is to take a close look at the presentation and problems in the management of male breast cancer in this environment.

PATIENTS AND METHOD:

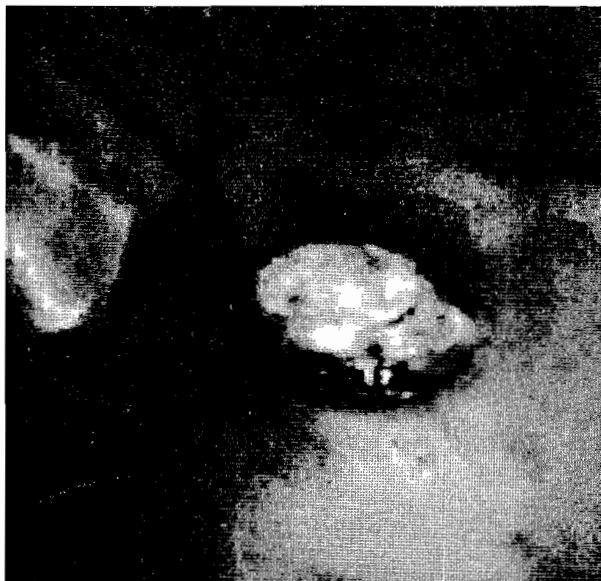
Eleven case records of male breast cancer that had a histological diagnosis at the University of Maiduguri Teaching Hospital between 1989 and 2003 were retrieved from the medical records department and studied. Also total number of cases of breast cancer recorded at the cancer registry of the hospital during the said period was obtained. Information regarding age of patient, presenting complaints and duration, possible treatment received before presenting to hospital, type of treatment and its outcome including follow-up were extracted and analysed.

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RESULTS:

There were Two hundred and ninety five cases of breast cancer seen at the University of Maiduguri Teaching Hospital between 1989 and 2003. Of these 11 cases constituting 3.7% were male breast carcinomas. The male to female ratio was 1:26. Their ages were between 19 and 80 years with the peak age range at 40-49 (36.4%) years. All the patients presented after one year of onset of symptoms with advance disease (fig. 1), four of which have tried traditional treatment before presentation. The usual presentation was breast lump 11(100%), ulcerations 6(54.5%), nipple discharge 4(36.4%) and metastases to the ipsilateral axillary lymph node 11 (100%). Two patients had metastasis to the lungs, one to the liver. Ten of the patients had some form of surgery; six toilet mastectomy and four modified radical mastectomy. All the 11 patients received hormonal treatment in form of Tamoxifen 20mg twice daily. In addition, two patients had sub capsular orchidectomy and four patients had cytotoxic chemotherapy. Two patients had secondary skin grafting of raw areas weeks after toilet mastectomy. Two patients died in the course of hospital stay. Four patients were lost to follow-up after discharge, two were followed-up for six months, two for one year and only one patient was followed-up for more than two years.

Figure 1. Advance carcinoma of right breast in a 53 years old man



DISCUSSION:

Male breast cancer is generally rare^{1, 2}. In the United States it accounts for about 1% of all breast cancers.

The incidence however appears higher in Africa, with figures above 6% in Egypt and Tanzania^{4, 5}. Here in Nigeria, the incidence varies from 3.4% in Ibadan⁶ to as high as 8% and 9% in Enugu⁷ and Zaria⁸ respectively. In this study the incidence of 3.6% is similar to the finding in Ibadan Western Nigeria, but at variance with that of Enugu Eastern Nigeria and Zaria Northern-western part of Nigeria. This may suggest that environmental factors have a role in the evolution of male breast cancers. Though a number of risk factors like radiation exposure, oestrogen administration and diseases associated with hyperoestrogenism such as cirrhosis and Klinefelters syndrome are known to be associated with male breast cancer, we were unable to identify any of these in our series. Male breast cancer is also associated with strong familial tendencies with increased risk in families in which the BRCA 2 mutation on chromosome 13q has been identified¹³. The mean age at presentation was 40-49 years, which is a decade lower than the Eastern Nigerian series and much younger than the European series (60-70)¹⁵. The delay of over 12 months before presentation in all our patients may be attributed to the high level of illiteracy, poverty and fear of the unknown (operation), which is a serious problem in this environment. All the patients presented late with advanced disease (stage III and IV). All the patients with stage III disease had modified radical mastectomy while those with stage IV disease had toilet mastectomy with the exception of one. They also received additional hormonal therapy with Tamoxifen and four had cytotoxic chemotherapy. Generally hormonal therapy is the mainstay of treatment for metastatic carcinoma of the breast¹⁵.

Though the prognosis of male breast cancers are thought to be poor, the prognosis corrected for age and stage are similar to breast cancers in women. With male breast cancers having higher percentage of hormonal receptor positivity than women marched for tumor stage, grade and age that should suggest a better prognosis¹⁶. The poor prognosis seen in most African literature is largely due to late diagnosis. It is hoped that increased public awareness about this problem, through public enlightenment programmes could lead to early presentation and diagnosis and hence better outcome.

CONCLUSION:

Male breast cancers though rare with 3.7% incidence are higher than the Caucasians 1% but lower than most African studies. All our patients presented late with advance disease and therefore with poor prognosis. It is hoped that, increased public awareness through enlightenment programmes would improve the out come.

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