



Case Report

A Case Report of Advanced Male Breast Cancer in A 70 Years Old Patient

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Abstract

Male breast cancer is rare. It accounts for 0.2% of all cancers and about 1% of all breast cancer. Because of the rarity of the disease and the low index of suspension, diagnosis is delayed in a significant fraction of patients. The objective of this article is to increase the medical community's awareness of the disease in this setting and thus favorably change its natural history by earlier diagnosis. The present study reported the case of a 70 year old man who was diagnosed with an advanced infiltrating ductal carcinoma.

Key words: Male breast cancer, infiltrating ductal carcinoma, GnRH analogue- Gonadotropin releasing hormone analogue, DES-Diethylstilbestrol

TAJ 2013; 26: 103-105

Introduction

Male breast cancer is rare. It accounts for 0.2% of all cancers and about 1% of all breast cancer (1,2). The American Cancer Society estimates about 2,600 new cases of invasive cancer will be diagnosed and about 440 men will die for breast cancer in the United States for 2016 (3). Among the histologic types, invasive ductal carcinoma is the most prevalent breast cancer in males, with an incidence varying from 65 to 95% (2,4). Male breast cancer has unimodal age- frequency distribution with a peak incidence at 71 years old. Conversely, female breast cancer has a bimodal age- frequency distribution with early-onset and late-onset peak incidences at 52 and 72 years old, respectively (5). This study examined a 70-year-old man without important risk factors who was diagnosed with infiltrative ductal carcinoma.

Case presentation

Md. Yunus Ali, 70 years old farmer, normotensive, non diabetic, smoker, non-alcoholic hailing from Rajpara, Rajshahi attended at oncology out patient department with the complaints of lump in the left breast for four years, ulceration over the lump for one year and bleeding from ulceration for the last few days.

According to statement of the patient he was reasonably well four years back. Then he noticed small lump on his left breast region. The lump was painless and there was no change in size and shape, so he did not seek any medical attention. For the last one year the lump became slowly enlarging and developed pain and for this reason he took Homeopathic treatment. During this period he developed ulceration over the swelling. Bleeding occur from the ulceration for last few days. On query he also mentioned weight loss of about 4 kg in last six months and diffuse pain in multiple site of

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the body for few days. He has no history of familial breast cancer, gynecomastia, solid organ tumors, liver disease, testicular abnormality or any hormonal or steroidal medication.

Physical examination of the left breast revealed a lump of about 06 x 04 cm with irregular surface & margin, tender, hard, fixed with underlying structure and overlying skin. The overlying skin was ulcerated and bleeding from ulcer was present. Examination of right breast revealed no abnormality. There was palpable anterior axillary lymph nodes on left side, which were multiple, non tender, hard, matted, fixed with overlying skin and no discharging sinus. Bony tenderness was present over ribs, lower thoracic and upper lumbar spine.

Fine needle aspiration cytology (FNAC) from left breast lump show fleshy and anaplastic ductal epithelial cells in groups and sheets – infiltrative ductal carcinoma. Whole body bone scan shows increase radiotracer uptake in multiple ribs (right 3rd, 4th, 5th), multiple vertebrae (D8-L2) and hip bone. Full Blood count, serum creatinine, serum bilirubin, SGPT, CA 15-3 (18 u/ml), X-ray chest P/A view, ECG, USG of abdomen were reported as normal. Finally patient was diagnosed as infiltrative ductal carcinoma of left breast, stage IV. Palliative systemic chemotherapy with FAC regimen (5-fluorouracil, adriamycin, cyclophosphamide) and zoledronic acid for bone metastasis was advised.

Discussion

The incidence of male breast cancer varies on a worldwide basis by geographic location, with the highest rates in some sub-Saharan countries (6). The risk of male breast cancer is related to an increased lifelong exposure to estrogen or to reduced androgen. The strongest association in men with Klinefelter syndrome (XXY), they have a 14-50 fold increased risk of developing male breast cancer and account for 3% of all male breast cancer cases. Also men who carry a BRCA1 or particularly a BRCA2 mutation, have an increased risk of developing breast cancer (7). The following conditions have been reported to be associated with an increased risk of breast cancer in men: chronic liver disorders, such as cirrhosis, chronic alcoholism, schistosomiasis, a history of mumps orchitis, undescended testes, or testicular injury; and feminization, genetically or by environmental factors. In contrast gynecomastia alone does not appear to be a risk factor (8).

The most common presentation of male breast cancer is a painless, firm subareolar mass; the second most

common presentation is a mass in the upper outer quadrant (9,10). There is slight predilection for the left breast in multiple series. Bilateral breast cancer is distantly unusual in men (< 1%). Other presentations may include nipple retraction, ulceration of the nipple, skin fixation or fixation to the muscle, or enlarged axillary adenopathy. Nipple discharge is an unusual presentation of the disease, but patients may present with a bloody or serosanguineous discharge.

The most common histopathologic type of male breast cancer is invasive ductal carcinoma. Approximately 90% of all breast cancer in men is invasive, and the remaining 10% is noninvasive. Mammography detects 80-90% of patients with breast cancer who present with suspicious masses. Mammographic characteristics of male breast cancer are sub-areola and eccentric to the nipple. According to Appelbaum et al, "Margins of the lesions are well defined, calcifications are rarer and coarser than those occurring in female breast cancer" (11). Fine needle aspiration and surgical biopsy in high-risk patients will confirm the diagnosis and provides an indication about potential response to hormonal treatment. Other investigations may be done according to signs and symptoms of metastatic organ involved (commonly bone, lung, lymph node, liver and brain).

Radical mastectomy with subcutaneous reconstruction is the most frequently used procedure, while simple mastectomy remains limited to patients either with good prognosis and/or to those patients with very poor prognosis and at high risk for extensive surgery. Hill et al, reported an overall five year and ten year survival rate in patients with localized disease to 86% and 64% respectively. With positive lymph nodes, the five and ten year survival rate decreased to 73% and 50% respectively (12). Radiation therapy is used for patients with localized disease and a high risk for surgery, but it is given more often to alleviate symptoms in patients with advanced disease. Patients with extensive metastatic disease are treated by hormonal manipulation (GnRH analogue, DES, orchidectomy) where two thirds of these patients respond to hormonal therapy. Chemotherapy is used in adjuvant setting and for metastatic disease as well.

Conclusion

Male breast cancer, though very rare, does exist. Efforts to increase awareness among patients and physicians will lead to earlier presentation, and therefore diagnosis before spreading to the axilla and other organs. Like the majority of cancers, male breast cancer can be cured or controlled if diagnosed and treated properly at its early stages.

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