

A Case of Locally Advanced Breast Cancer Requires a Modified Treatment Strategy in a 59-Year-Old Male: A Review

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ABSTRACT

Patient: A male, 59

Invasive ductal carcinoma was the final diagnosis.

Symptoms: discharge that smells foul and a breast lump that hurts prescription drugs:

Modified radical mastectomy is the clinical protocol.

Surgery is a speciality.

Keywords: Male breast cancer, erbB-2, anxiety, mastectomy, ductal breast cancer, and breast neoplasms.

I. INTRODUCTION

A small percentage of all male cancers, or about 1%, are male breast cancers. This uncommon cancer's aggressive nature can lead to a terrible prognosis, and the lack of knowledge of it causes delayed detection. This case study covers the clinical care strategy for a 59-year-old man with locally advanced, high-grade breast cancer who refused to undergo diagnostic tests. Male breast cancer is incredibly uncommon, making for less than 1% of all breast tumours and 1% of all malignancies in males worldwide. Male breast cancer incidence has recently grown, going from one case per 100,000 males in the late 1970s to two cases per 100,000 men from 2000 to 2004. From 1975–1979 to 2010–2014, the American Cancer Society noted a comparable rise in the incidence of breast cancer in males 9. Nonetheless, there are regional differences in the frequency of male breast cancer, with >6% of all male breast cancers being reported in Tanzania and parts of Central Africa. As a result of a delay in identification and treatment, more than 40% of men with breast cancer arrive with advanced illness (stage III or IV). To minimise delays in consultation and diagnosis and to stop metastasis, it is essential to evaluate the causes that cause people to put off obtaining medical care. Since male breast cancer is so uncommon and because the morphology of the breasts differs between men and women, clinical

recommendations for the diagnosis and treatment of breast cancer in males are based on those for women. Breast cancer in males can manifest clinically in a variety of ways, from occult cancer with palpable axillary nodes to obvious breast masses with skin alterations. Histologically, males can develop any kind of breast cancer, with the most prevalent type being invasive ductal carcinoma not otherwise defined (or ductal carcinoma NOS). Breast cancer patients frequently experience psychological discomfort, which increases their chance of developing depression, mood disorders, and anxiety. Counseling is therefore a crucial part of managing patients both before and after therapy. The predominant method of treatment for locally advanced breast cancer is surgery, which is followed by neoadjuvant systemic therapy. Women with HER2 positive or triple-negative breast cancer are advised to follow this course of therapy. This case study presents the clinical care strategy for a 59-year-old man with locally advanced breast cancer who was reluctant to undertake diagnostic tests.

II. CASE REPORT

A 59-year-old man who had a significant left breast tumour and swollen axillary lymph nodes presented with the case. The patient had disregarded the lump and refused all kind of medical testing. The diagnostic workup was altered, a psychiatrist was brought in, and the patient finally consented to a modified radical mastectomy. A high-grade invasive ductal carcinoma with lymph node metastases was identified by histopathology. The human epidermal growth factor receptor 2 (HER2), oestrogen receptor (ER), and progesterone receptor were all triple positive in the breast cancer (PR). Herceptin, tamoxifen, and radiation therapy were used as adjuvant therapies

History

A 59-year-old guy who had a discharge from a left breast tumour arrived to the surgical clinic. More than a year had passed since the mass first began to grow. The patient detailed many unsuccessful attempts to cauterise the left breast. The patient waited until he was in agony and began to have tumour discharge that smelled bad before seeking medical attention. The only severe medical condition he had was poorly managed diabetes. The patient had only completed elementary school. He denied having ever used anabolic steroids, used drugs, abused alcohol, or had a history of mental illness. Over 30 years, he admitted to consuming around two packs of cigarettes every day. There was no prior history of radiation or trauma exposure. There was no history of cancer in his family.

Clinical results

The patient had a body mass index (BMI) of 36.9 kg/m², typical male body hair distribution, no gynecomastia, and looked to be in generally good health. During physical examination, a firm, erythematous, ulcerating mass of around 9 cm by 5 cm was seen in the subareolar area of the left breast and axilla (Figure 1). The tumour had twisted his left nipple, but there was no discharge (Figure 1). He had a typical body temperature. The ipsilateral axilla was examined, and an enlarged mobile lymph node was seen. During inspection, the right breast and axilla were both normal.

Experimental studies

The findings of the liver function tests were as follows: albumin, 28 g/L; total protein, 48 g/L; ALT, 38 units/L; AST, 42 units/L; ALP, 87 IU; total bilirubin, 5.9 mol/L; conjugated bilirubin, 2.3 mol/L; amylase, 56 units/L; and lipase, 37 units/L. The outcomes were all within the expected ranges. Cancer antigen 19-9, 7 IU/mL; cancer antigen 15-3, 14.7 U/mL; prostate-specific antigen (PSA), 1.9 ng/mL; and carcinoembryonic antigen (CEA), 2.2 ng/mL—all of the tumour markers—were likewise within the normal range. The outcomes of other lab tests were equally unimpressive.

After being counselled on the value of histopathological diagnosis and how it affects his treatment options, the patient declined core-needle biopsy or fine-needle aspiration cytology due to his fear of pain.

Imaging

Due to soreness and discomfort in the left breast, mammography and ultrasound breast examination were not possible. Despite being given potent painkillers, the patient declined these imaging tests. The patient disobeyed the advice to perform a bone scan and a computed tomography (CT) of the chest, abdomen, and pelvis as part of a diagnostic workup for metastases. It was asked to contact a psychiatrist. Anxiety was identified as the patient's illness. His main worry was that the biopsies or any touch with the breast tumour during a mammogram or ultrasound examination may cause the illness to spread and deteriorate his health. To relieve his anxiousness, he received oral alprazolam 0.5 mg every six hours. Psychotherapy and counselling were also offered. Ultimately, the patient decided to only have imaging done without the machinery coming into touch with his breast lesion. The left breast was found to have a heterogeneous necrotic exophytic tumour on a CT scan of the chest, abdomen, and pelvis, along with thickening of the skin. A ipsilateral axillary lymph node with cortical thickening was also seen on the CT scan, but no distant metastases were found. Bone metastases were not found during a bone scan.

Treatment

The clinical presentation and the results of the CT scans were regarded as diagnostic for locally advanced breast cancer with metastatic to the ipsilateral axillary lymph node despite the absence of prior diagnostic histology. Neoadjuvant chemotherapy was not an option for the patient since there was no information on histological type, grade, or receptor status, thus a mastectomy was suggested instead. Treatment for axillary metastases has been suggested as axillary dissection. On the patient, a modified radical mastectomy was done. The tumour was not discovered to be linked to the pectoralis major muscle intraoperatively. Axillary dissections at levels I and II were conducted, and the wound was mainly healed without the need for a skin transplant.

Surgical histopathology

The surgical resection specimen of the breast had invasive ductal carcinoma with dermal deposits and lymphovascular invasion, according to the histology. The grade 3 tumour measured 8.8 cm in size. Tumor-free surgical resection margins were seen throughout. One of the 19 lymph nodes that were dissected during the axillary lymph node

dissection had metastatic deposits . Strong progesterone receptor (PR) positivity (50%), oestrogen receptor (ER) positivity (70%), and HER2 positivity (3+) were detected utilising immunohistochemistry as a biomarker . Stage IIIB breast cancer was present (pT4b, N1, M0).

Adjuvant therapy

For adjuvant therapy, the patient was sent to a medical oncologist and a radiation oncologist. Adjuvant radiation therapy to the chest wall and axilla, followed by adjuvant tamoxifen for at least five years, were all planned as part of the postoperative regimen of herceptin and pertuzumab. In order to screen for BRCA gene mutations, the patient was also recommended to a genetic counsellor.

III. CONCLUSIONS

Due to low patient knowledge and an increase in cases that come at an advanced stage, male breast cancer is an uncommon but difficult disease for the physician to treat. To avoid the delay in clinical evaluation, prevent axillary and distant metastases, and assure identification at a therapeutic stage, more public knowledge of male breast cancer is imperative. Improving patient prognosis depends on identifying and addressing the causes of delayed medical treatment. The treating physician must be aware of the benefits of enlisting a psychiatrist as soon as feasible in the clinical care of patients who are in denial or who have misconceptions about their health that might impair their capacity to make decisions. It's crucial that the treatment strategy be adaptable in difficult situations to get through them. As demonstrated by this instance, it is feasible to safely modify the diagnostic process and the treatment strategy while adhering as closely as possible to the standards of care recommendations in order to provide the patient with the best results.

REFERENCE

- [1]. Korde LA, Kamin L, Zujewski JA, et al. Overview of multidisciplinary conference on male breast cancer and suggested research. 2010;28:2114–22 in J Clin Oncol. [Free PMC article] [PubMed] Using Google Scholar
- [2]. The growing prevalence of male breast cancer, Speirs V, Shaaban AM. 2009;115:429–30. Breast Cancer Res Treat. [PubMed] Using Google Scholar
- [3]. Male breast cancer: A retrospective analysis, Yoney A, Kucuk A, Unsal M. 2009;13:103–7. Cancer Radiother. [PubMed] Using Google Scholar
- [4]. Anderson W.F. Jatoi, J. Tse, and R. Rosenberg PS: A population-based comparison of male and female breast cancer. 232–39. J Clin Oncol. 2010;28. [Free PMC article] [PubMed] Using Google Scholar
- [5]. Devesa SS, Brinton LA, Althuis MD, and Anderson WF. What distinguishes male breast cancer from female breast cancer? 2004;83:77-86.
- [6]. Tyczynski JE, Hill TD, Khamis HJ, and Berkel HJ. Trends in breast cancer incidence, tumour features, and survival are compared between men and women. Ann Epidemiol 15:773–80 (2005). [PubMed] Using Google Scholar