CASE REPORT

Small Breast Abscess Presented as Invasive Ductal Carcinoma in a Young Female

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ABSTRACT

Invasive ductal carcinoma of breast and tuberculosis are very rare conditions to coexist. There are no pathognomonic symptoms or signs to distinguish both diseases. A female patient was referred from the emergency for incision and drainage of an abscess in the left upper outer quadrant; with severe localized pain accompanied by pain in the rest of the breast. It was found per-operatively that, besides the abscess in which thick pus was present, cancerous cells were found prevalent in three quadrants of the left breast.

KEY WORDS: *Invasive Ductal carcinoma, Tuberculosis, DCIS, IDC.*

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INTRODUCTION

Any uncontrolled cellular growth that occurs within the breast is regarded as breast cancer. After lung cancer, breast cancer is the second leading cause of cancer death in women. Among the many different forms of breast cancer, the most common type of breast cancer found in women is called ductal carcinoma in situ (DCIS).[1] DCIS is a noninvasive form of breast cancer where malignant cells arise and proliferate within the breast ducts without invasion of the basement membrane.[2-7] DCIS is a precursor for invasive ductal carcinoma, therefore, if left untreated, the malignant cells located in the ducts of the breast can break through the epithelial membrane and invade the surrounding tissues of the breast to become an invasive, infiltrating type of breast cancer.[1] Invasive ductal carcinoma may develop in 30% to 50% of DCIS cases.[3]

The invasive ductal carcinoma (IDC), can remain localized, which means it stays near the site where the tumor originated or the cancer cells may enter the bloodstream or lymphatic system and metastasize anywhere in the body [8]. Approximately 232,340 new cases of invasive breast cancer and 39,620 breast cancer deaths are expected to occur among US women in 2013. It has been projected that one in 8 women in the United States will develop breast cancer in her lifetime.[9]

CASE

A young female of 32 years was referred from the emergency department, with severe localized pain in the left upper outer quadrant of breast and vague pain in the rest of the left breast. A previous ultrasound of the left breast depicted presence of a thick walled cyst measuring 2cms × 2.5cms at 12'0 clock position in left breast mid zone, containing debris fluid with the rest of the breast reported as normal with fibro fatty glandular tissues. No enlarged lymph nodes were reported in the axilla bilaterally. On clinical examination the left breast appeared to have a huge lump behind the acute small very painful lump which was of 2.5cms ×2.5cms. Due to the severe pain experienced by the patient, the exact size of the lump behind the acute inflammatory lump could not be evaluated on clinical examination. Instead it was estimated from visual appearance to be of 6.5cms × 6.5cms. Two Lymph nodes were palpable in the left axilla on deep palpation. The patient was shifted to the operation theater for incision and drainage. Per-operatively it was found that thick pus was present inside the cyst. The pus was taken and sent for cytological analysis. Further wound examination showed presence of cancerous cells in three quadrants of the left breast with only the lower outer quadrant spared. To a limited extent the auxiliary tail was not involved. The axillaries clearance was performed through which three lymph nodes were found enlarged. One of them was hard from level-I indicating involvement, while the other two were only inflamed. Upon consent from the family and husband for modified radical mastectomy all three lymph nodes were operatively excised..

The samples of breast tissue, lymph nodes and the caseasious material were sent for histopathology cytological testing. As muscles were not involved two radivac drains were retained. The post-operative period was uneventful and the patient was discharged on fifth day with one drain for ten days. The patient was referred to Kiran Hospital for oncology opinion. No metastasis were found in bone, brain, liver or contralateral breast and axilla. The histopathology report supported invasive ductal carcinoma stage II of left breast with clear margins of the dissected breast sent for histopathology. Out of three lymph nodes send for histopathology two were just inflammatory and one came positive for the metastasis of cancer. The follow-up was conducted for any recurrence on ipsilateral or contralateral breast.

DISCUSSION

The coexistence of carcinoma and tuberculosis (TB) of the breast and the axillary lymph nodes is rare and was first reported by Pilliet and Piatot in 1897.[10] Breast cancer does not typically produce any signs or symptoms in its earliest stages when tumors are most treatable.[11] DCIS is no exception and is typically asymptomatic.[7] This is the reason it is most important for annual screenings to detect breast abnormalities as early as possible before any symptoms develop.[11] However, the most common signs of breast cancer are a lump or palpable mass detected during clinical examination or a suspicious lesion visualized during a medical imaging screening. Other concerning clinical

indications of breast cancer can include dimpling or swelling of the breast, skin irritation, areas of breast pain, redness or scaliness of the breast skin or nipple, nipple inversion, or any type of nipple discharge, other than breast milk.[1,11] As in our case initially the lesion was of DCIS, which due to no significant signs and symptoms remained undiagnosed. This resulted in the infiltration of the ductal walls and local spread which extended to the involvement of one node as well. The cancer was found as a coincidence of breast abscess drainage. The breast lump could have been diagnosed earlier, but as the patient never had any symptoms she did not undergo any breast examination. As the literature search shows breast cancer, specially DCIS is a silent feature and usually diagnosed on mammography. It is concluded that females with a family history of breast cancer should schedule routine annual check-ups with their consultants.

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