Case Report

Ectopic breast carcinoma: A case report

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ABSTRACT

Data about the occurrence of primary carcinoma in ectopic breast tissue are rare and limited to small case series. Nowadays, its diagnosis and management are not definitively established. We report the case of a 61-year-old woman with primary carcinoma originating from the left axillary ectopic breast which was treated surgically by ectopic breast mastectomy with axillary lymph node dissection.

Key words: Axilla; carcinoma; ectopic breast.

Introduction

Ectopic breast carcinoma (EBC) is a rare form of breast cancer and only a small number of cases have been reported. At the time of diagnosis, the vast majority of patients are in an advanced stage with lymphatic spread and systemic metastasis. We present a case of EBC arising in the left axilla with the goal of increasing awareness of this uncommon entity among clinicians and pathologists for early diagnosis and appropriate management with a great chance of favorable long-term outcome.

Case Report

A 61-year-old woman presented in our department complaining of a painful mass in her left axillary area discovered 2 months before. There was no family history of breast cancer. Clinical examination revealed a painful solid and fixed mass in the left axilla with ulceration of the skin [Figure 1]. Breasts were bilaterally normal on mammography (MMG) and ultrasonography (USG). However, USG objectified a heterogeneous hypoechoic lesion in the left axilla. Magnetic resonance imagining (MRI) of the breasts demonstrated a left axillary mass with irregular border, measured 23 mm × 15 mm and separated from the normal anatomic breast [Figure 2]. Tru-cut biopsy was performed from the axillary mass which revealed invasive ductal carcinoma adjacent to normal breast tissue. Based on discontinuity between normal anatomic breast and axillary mass on USG and MRI in association with findings of invasive ductal carcinoma adjacent to normal breast tissue on biopsy, the preoperative diagnosis was ectopic axillary breast carcinoma. Abdominal USG, bone scintigraphy, and tumor marker levels (CEA, CA15-3) were normal. The surgical management was a left accessory breast mastectomy with axillary lymph node dissection. The final pathologic report was invasive ductal carcinoma surrounded by normal mammary tissue with negative resection margins, Scarff-Bloom-Richardson grade 2, HER2 negative, ki67 40% with positive hormone receptors. Two of the 14 dissected lymph nodes were positive. Postoperatively, she received

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Figure 1: Preoperative view of the accessory breast in the left axilla, note the ulceration of the skin

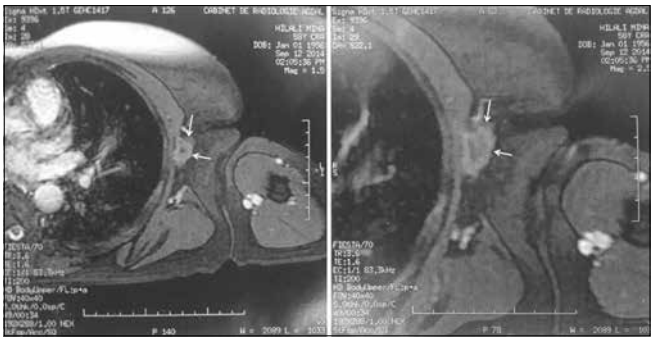

Figure 2: Breasts MRI shows low signal intensity mass with irregular border, involved pectoralis major, in the left axillary region (white arrows)

6 cycles of chemotherapy and radiotherapy to the left axilla and thoracic wall followed by tamoxifen for 5 years. Her postoperative course has been uneventful for 16 months following the surgery.

Discussion

Ectopic breast tissue can occur as supernumerary breasts (having a nipple, areola or both), or as aberrant breasts (without nipple or areola).[1] Its estimated incidence varying from 0.22% to 6%.[2] It can be seen in both sexes. However, women are reported to exhibit an increased incidence of ectopic breast compared with men.[2] Embryologically, ectopic breast tissue develops because of failed resolution of the mammary ridge, also termed the milk line, an ectodermal thickening which extends from the axilla to the inguinal folds and appears in the 6th week of gestation. This abnormality may appear at any site along the milk line, but axilla is the most frequent site followed by the area immediately inferior to the normal breast.[3] More rare locations outside of the milk line have been described such as the face, posterior neck, midline of thorax, abdomen, vulva, and perineum.[4,5] Ectopic breast tissue is under the same hormonal influences as the normal breast and can develop similar types of benign and malignant pathologies. The most common are fibroadenomas, cysts, duct hyperplasia, and rarely carcinoma.[2] The reported incidence of EBC is between 0.3% and 0.6% of all breast cancers.[2,6] Because ectopic breasts are located most frequently in the axilla, the latter does the most found site of the primary cancer comprise 60–70% of all cases reported.[7] There are many lesions which enter into the differential diagnosis with EBC. In the axillary site, it can be confused with lipoma, lymphadenitis, lymphoma, metastatic lymphadenopathy, sebaceous cyst and hydradenitis suppurativa. Usually, MMG and breast ultrasound helps in excluding associated breast pathologies. In addition, USG detects ectopic breast tissue, typically seen as an echogenic area resembling normal glandular tissue, and helps in defining characteristics of the mass. However, MMG does not depict ectopic breasts because of their peculiar location, but oblique and exaggerated craniocaudal views can visualize it in the axilla.[8] These features resemble to normal glandular parenchyma but occur separately. Cancer arising from ectopic breasts is depicted as a typical malignant mass with similar characteristics to those of metastatic axillary lymph nodes associated with malignant disease. Thus, there are no specific findings for EBC.[8] On MRI, the signal intensity of ectopic breast tissue is similar to that of the adjacent, noncontiguous breast tissue, but the amount of interspersed fat is variable. Fine needle aspiration cytology or tru-cut biopsy of the mass should be performed to harvest cells or tissue for histologic examination. Similar to anatomic breast cancer, invasive ductal carcinoma is the most common histological type representing 79% of all EBC.[9] Lobular, medullary, mucinous, apocrine, and papillary carcinoma as well as cystosarcoma phylloides are also described.[1] In the review by Nihon-Yanagi *et al*., medullary, mucinous, and apocrine carcinomas were more common among EBCs and the reasons for these differences in the distribution of histological types were unknown.[7] Surgical management of EBC combines wide resection of the tumor with surrounding tissue, covering skin, and axillary lymph nodes dissection.[2] Ipsilateral mastectomy has no additional benefit for survival if MMG and USG of the anatomic breast are normal, as was in the present case, but should be performed when differential diagnosis is challenging.[10] Zhang *et al*. have recommended mastectomy when the accessory breast is closely connected to normal breast tissue, but when the accessory gland constitutes a separate anatomical structure, the resection of normal breast tissue appears to be unnecessary.[2] Regimens for postoperative treatment are similar to those used for anatomic breast carcinoma. Radiotherapy of the tumor site is necessary for the control of local spread and radiation of the ipsilateral anatomic breast is not systematically performed. Systemic adjuvant therapy is more frequently required because lymph node disease is usually found. The prognosis of EBC is difficult to establish due to limited follow-up and staging data as well as small sample size. Some authors have reported that the outcomes of EBC are poorer than

those of anatomic breast cancer as the tumor is located near the axillary lymph nodes and is therefore associated with early metastasis to these nodes.[2] Moreover, a review of 94 Japanese cases did not indicate that EBC has a higher risk of lymph node metastasis than usual breast cancer.[7]

Conclusion

EBC should be considered in case of mass or skin lesions located at any site along the milk line. Because of poor prognosis and high incidence of metastasis due to delayed diagnosis, we recommend prophylactic excision of ectopic breast tissue.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

References

1. Shamim M, Baddar N. Axillary ectopic carcinoma of breast. J Pak Med Assoc 2011;61:916-8.
2. Zhang S, Yu Y, Qu W, Zhang Y, Li J. Diagnosis and treatment of accessory breast cancer in 11 patients. Oncol Lett 2015;10:1783-8.
3. Önel S, Karateke F, Kuvvetli A, Özyazıcı S, Özdoğan M. Ectopic breast cancer: A case report. Ulusal Cer Derg 2013;29:96-8.
4. Pathak S, Preston J. A rare case of multiple accessory breast tissue in the axillae, lower abdomen and vulval areas. J Obstet Gynaecol 2007;27:531 3.
5. Basu S, Bag T, Saha SK, Biswas PC. Accessory breast in the perineum. Trop Doct 2003;33:245.
6. Nardello SM, Kulkarni N, Aggon A, Boraas M, Sigurdson ER, Bleicher RJ. Invasive mucinous carcinoma arising in ectopic axillary breast tissue: A case report and literature review. American journal of case report 2015;16:153-9.
7. Nihon-Yanagi Y, Ueda T, Kameda N, Okazumi S. A case of ectopic breast cancer with a literature review. Surg Oncol 2011;20:35-42.
8. Adler DD, Rebner M, Pennes DR. Accessory breast tissue in the axilla: Mammographic appearance. Radiology 1987;163:709-11.
9. Marshall M, Moynihan J, Frost A, Evance R. Ectopic breast cancer: Case report and literature review. Surg Oncol 1994;3:295-304.
10. Markopoulos C, Kouskos E, Kontzoglou K, Gogas G, Kyriakou V, Gogas J. Breast cancer in ectopic breast tissue. Eur J Gynaecol Oncol 2001;22:157 9.