Case Report

Breast Carcinoma from Accessory Breast Tissue: A case report and Review of literature

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Abstract

Primary carcinoma of ectopic breast tissue has been reported only in a small number of cases. Awareness of physicians and patients about these unsuspicious masses is lacking, clinical diagnosis of accessory breast carcinoma is frequently delayed. Therefore, a mass should be examined carefully, and any suspicious lesions should be evaluated. In the present paper, we present the case report of a 35 year old male patient who reported with a large mass in the axilla and was diagnosed infiltrating duct carcinoma of the breast.

Keywords: Breast carcinoma, Tissues

Introduction

Primary carcinoma of ectopic breast tissue has been reported only in a small number of cases. Embryologically, ectopic breast tissue develops as a result of failed resolution of the mammary ridge, an ectodermal thickening that extends from the axilla to the external genitalia and has been found at sites as disparate as the axilla, labium, and the posterior thigh of a male patient[1-4].

Breast tissues develop from the ectodermal ridges, also known as the milk lines, on the ventral surface of the body, which extend from the axillae to the inguinal regions and end on the medial aspect of the thighs on both sides of the body. They spontaneously regress during embryogenesis, except for the pair at the pectoral region that forms mammary tissues in adults. Literature reports on accessory breast cancer developing from ectopic breast tissues are not infrequent. The outcome of accessory breast cancer is known to be poor due to its rarity, early lymph nodes involvement and late diagnosis[5,6].Hence; in the present paper, we present the case report of a 35 year old male patient who reported with a large mass in the axilla and was diagnosed infiltrating duct carcinoma of the breast.

Case Report

A 35 years old male presented to surgical OPD with a large mass arising from his Axilla for 3 months. There was some local pain. No history of fever, weight loss and any constitutional symptoms. There were no complaints of cough or dyspnoea. On examination, it was a firm to hard mass, slightly mobile over the chest wall but fixed to the Axillary structures. Left upper limb had weakness and pulse was feeble. Blood pressure on that arm was not recordable. Chest CT showed no involvement of chest wall. It did not infiltration around the branches of Brachial Plexus and around Axillary vessels. But the structures were displaced and the axillary vessels were compressed. Axillary lymph nodes were not enlarged. Core Biopsy showed adenocarcinoma of Breast but tumour was away from the male patient's nipple.

We excised the tumour with excess skin over it. The Tumour was free from the chest wall. The male patient's chest had only a nipple and areola. He did not have Gynaecomastia. The tumour had increased vascularity. It was possible to dissect the tumour free from the axillary vessels and Brachial Plexus. After the tumour was excised en bloc, skin was closed over a drain. Patient recovered uneventfully.

The final histopathology report came as infiltrating duct carcinoma of the breast. The histopathology showed that it was a carcinoma of breast tissue, but clinically it was arising from axilla and not from the breast itself. The nipple and areola were away from the mass. Postoperatively, the patient developed lymphoedema of the upper limb on the same side. Hence, he was not referred for radiation therapy. Patient came for 3 years for a follow up without any recurrence or without any metastases.

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Fig 1(a): Clinical preoperative photograph

Fig 1(b): Clinical preoperative photograph

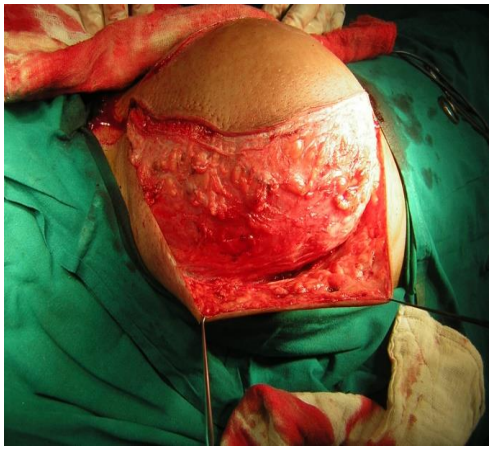

Fig 2: Intraoperative view

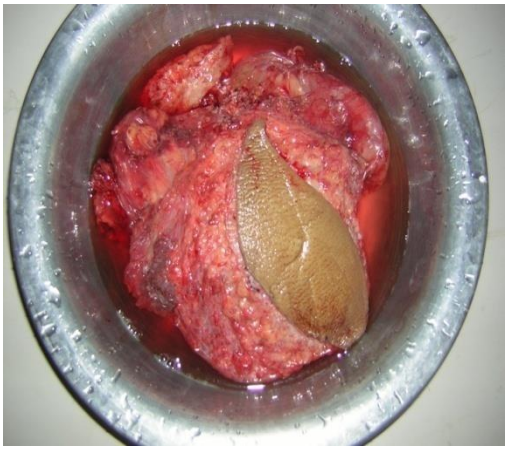

Fig 3: Excised mass

Fig 4: Postoperative view

Discussion

Supernumerary breasts are a relatively common congenital condition in which abnormal accessory breast tissue is found in addition to normal breast tissue. However, it may not be evident until puberty. Although accessory breast tissue is usually found along the thoracoabdominal region of the milk line (67%), which extends down to the groin, ectopic breast tissue may also be present in locations such as the face, back, and thigh. Evans et al reported that 71% of ectopic breast cancers were located in the axilla. Marshall et al reported that 58% occurred in the axilla, 18.5% in the parasternal, 8.6% in the subclavicular, 8.6% in the submammary, and 4% in the vulvar; 94.7% of patients were women, and only 5.3% were men. Breast tissues develop from the ectodermal ridges, also known as the milk lines, on the ventral surface of the body, which extend from the axillae to the inguinal regions and end on the medial aspect of the thighs on each side of the body[7-10]. In the classification of ectopic breast tissue by Copeland and Geschickter, accessory nipple or areolar formation or both, with or without glandular tissue, is termed supernumerary breast, as opposed to aberrant tissue referring to ectopic breast tissue without a nipple or areolar complex[3,4,10,11]. In the present paper, we present the case report of a 35 year old male patient who reported with a large mass in the axilla and was

diagnosed infiltrating duct carcinoma of the breast.A 35 years old male presented to surgical OPD with a large mass arising from his Axilla for 3 months. On examination, it was a firm to hard mass, slightly mobile over the chest wall but fixed to the Axillary structures. In a previous case reported by Khan RN et al, age of the patient was 36 years[12].In another case series reported by Zhang et al, median age of the patients was 38 years.The most common location of ectopic breast tissue is the axilla (Zhang et al)[13]. Other less common locations are the face, thighs, perineum, groin, vulva and shoulders. Ectopic breast tissue may consist of the breast parenchyma, areola, nipple or any combination of these three components. This breast tissue is subject to hormonal influences and undergoes physiological changes. In addition, a number of different neoplasms, benign and malignant, have been found in axillary breast tissue. The most common of these tumours reported in the literature is the fibroadenoma, and there are scattered case reports of other tumours, including phyllodes tumour and mammary carcinoma[14-16].In the present case report, the final histopathology report came as infiltrating duct carcinoma of the breast. Postoperatively, the patient developed lymphoedema of the upper limb on the same side. Patient came for 3 years for a follow up without any recurrence or without any metastases. Treatment of primary breast cancer in accessory breast tissue is also similar to primary cancer in the anatomic breast and may include any combination of surgery, chemotherapy, radiation, and endocrine therapy. Wide resection of the tumor and surrounding tissue including the skin and regional lymph nodes is the current standard of care[16,17]. Evans and Guyton concluded that there was no additional advantage of mastectomy versus local excision of accessory breast along with axillary lymph node dissection. Mastectomy can be considered only in those patients who have an additional lesion in breast. However if clinical examination and investigations like mammogram and MRI exclude its presence then patient can be spared of mastectomy with a close follow up.[18, 19] Thus, the prognosis of accessory breast cancer is difficult to assess as no long-term follow-up data regarding the prognosis of accessory breast cancer are available.

Conclusion

Awareness of physicians and patients about these unsuspicious masses is lacking, clinical diagnosis of accessory breast carcinoma is frequently delayed. Therefore, a mass should be examined carefully, and any suspicious lesions should be evaluated.

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