

Rare Case of Fibroadenoma within Ectopic Breast Tissue in Axilla – A Case Report and Review of Literature

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Abstract

Review Article

The congenital anomalies of breast, especially the polymastia (supernumerary breast) and polythelia (supernumerary nipple), can have varied presentations, associated renal anomalies, and pathologies arising from them. The axillary polymastia is a variant of ectopic breast tissue (EBT). Ectopic breast tissue can undergo the same physiological and pathological processes as the normally located breast. The incidence of fibroadenoma developing in ectopic breast is reported as a rare entity, the most common being the carcinoma. Here we report a case of fibroadenoma developing in ectopic breast tissue located in axilla.

Keywords: Fibroadenoma, ectopic breast tissue, axillary fibroadenoma.

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INTRODUCTION

Axillary breast tissue can be represented by ectopic tissue not connected to the breast. It may also be connected to the external part of thoracic breast; in this case it is called the axillary tail of Spence. Ectopic breast tissue, especially when found in the axilla is located in the subcutaneous tissue and deep dermis of the skin, where it often mingles with normal skin appendage glands [1]. Axillary breast tissue is a common variant of EBT, with a reported incidence of 2–6% in women [2]. It is twice as common in female patients as in males [3].

We here present a rare case of 42-year-old female of subcutaneous swelling in right axilla.

CASE REPORT

42-year-old lady presented with complaints of swelling in right axillary region since last 1 year. The mass was initially small and gradually increased in size. On local examination we found a (2 × 2 cm) mass in the left axilla. The mass was subcutaneous in position, firm, painless, freely mobile and completely isolated from the left breast. Skin over the swelling was normal. Clinical examination of both breasts and both the nipples were normal. Examination of axillae and neck was normal. No other abnormality was found.



Fig 1: Clinical photograph showing axillary swelling

Ultrasonography of right breast with axilla revealed well defined lobulated hypoechoic lesion in medial aspect of right axilla. No obvious invasion of underlying muscle and underlying soft tissue was found. Fine needle aspiration cytology (FNAC) report

showed benign breast lesion with possibility of fibroadenoma.



Fig 2: Ultrasonography showing axillary lump

All routine investigations were essentially normal. Patient underwent excision biopsy. Per operative finding was a subcutaneously located lesion which was excised. This anatomically superficial location of the lesion explains why this is an example of ectopic breast tissue rather than an extension of breast parenchyma into the axilla (axillary tail of Spence) which is located deep. Histopathological examination of the resected specimen was suggestive of fibroadenoma and the surrounding area shows features suggestive of normal breast tissue. Patient discharged in satisfactory condition and advised for regular follow up.



Fig 3: Operative photograph showing axillary fibroadenoma

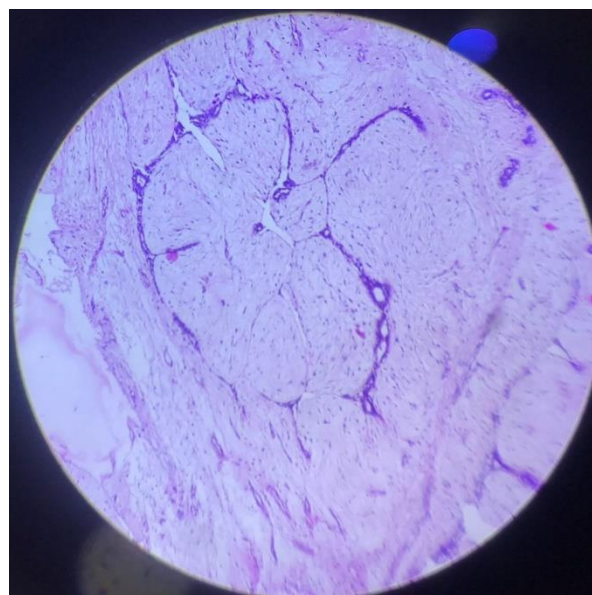


Fig 4: Histopathological examination of the resected specimen showing fibroadenoma

DISCUSSION

Polymastia is a term that is used to describe the presence of more than two breasts in human beings. It is synonymous with supernumerary breast, accessory breast, and ectopic breast tissue (EBT). During the 6th week of embryonic development, the mammary milk lines, which represent 2 ectodermal thickenings, develop along the sides of the embryo, extending from the axillary region to the groin. In normal development, most of the embryologic mammary ridges resolve, except for 2 segments in the pectoral region, which later become breasts. Failure of any portion of the mammary ridge to involute can lead to ectopic breast tissue with (polythelia) or without (polymastia) a nipple-areolar complex. Therefore, ectopic breast usually occurs along the “milk line” or mammary line [4].

Ectopic breast tissues are reported in locations other than the milk line, face [5], foot [6], lumbar region, vulva [7], and perineum. Supernumerary tissues present in any location other than along the milk line are supported by two beliefs. One is that it represents a migratory arrest of breast primordium during chest wall development [8]; the other belief is that it develops from the modified apocrine sweat glands [9].

In 1915, Kajava published a classification system for supernumerary breast tissue that remains in use today. Class I consists of a complete breast with nipple, areola, and glandular tissue. Class II consists of nipple and glandular tissue but no areola. Class III consists of areola and glandular tissue but no nipple. Class IV consists of glandular tissue only. Class V consists of nipple and areola but no glandular tissue (pseudomamma). Class VI consists of a nipple only (polythelia). Class VII consists of an areola only (polythelia areolaris).

Class VIII consists of a patch of hair only (polythelia pilosa) [10]. Our patient belonged to class IV.

Few case of fibroadenoma in the axilla has been reported in literature. Coras et al. reported a case of axillary fibroadenoma in a 23-year-old woman, [2] while Aughsteen et al. reported a similar case in a 28-year-old woman [11].

Usually, carcinoma arising from the ectopic breast presents late with poorer prognosis due to delay in the diagnosis. This delay happens due to a broad differential diagnosis for an axillary lesion, including lipoma, sebaceous cyst, vascular lesions, suppurative hidradenitis, cat scratch disease, lymphadenopathy, secondaries in lymph nodes, tuberculosis, axillary tail of Spence, or even a torn muscle belly and malignancies [12]. When tumours or nodules are found along the mammary line, the presence of breast tissue should be considered during the investigation [9]. It is clinically wise to evaluate and screen carefully cases of supernumerary breast for any pathology and for any associated urogenital anomalies. FNAC is very valuable in diagnosing the lesion in EBT swellings. Fibroadenoma in the EBT should be diagnosed with the same methods applied to normal breast tissue (mammography, ultrasonography, cytology and biopsy).

In our case, excision of the fibroadenoma has been done and the patient is on regular follow up.

CONCLUSION

In conclusion, when lumps or nodules are found along the mammary line, possibility of ectopic breast tissue should be considered and appropriately investigated. Ultrasonography and FNAC [Fine needle aspiration cytology] are valuable diagnostic tools. The treatment options for EBT depend upon the psychological factors, symptoms, and the presence of pathology.

Conflict of interests: None

Ethical clearance: Not required

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