

Fibroadenoma of Ectopic Breast Tissue in Axilla : ARare Case Report

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Abstract

Fibroadenoma of ectopic breast tissue is a rare disease. Ectopic breast tissues are found along milk line. Malignancy is more common than fibroadenoma in ectopic breast tissue. Ectopic breast tissue can be present with nipple or without nipple areola complex. Here we report a case of 40 years old patient having fibroadenoma of ectopic breast tissue in right axilla without nipple areola complex. Patient underwent excision and biopsy. Histopathology confirmed it as fibroadenoma of the ectopic breast tissue. This case has been reported for its rarity and to reemphasise the importance of screening of EBT for any pathology during routine screening of breast.

Keywords: Ectopic breast tissue, Fibroadenoma, Milk

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I. Introduction

Presence of more than two breasts is called as polymastia also known as supernumerary breast, accessory breast or ectopic breast tissue (EBT). They may be presented either with nipple areolar complex (polythelia) or without nipple areolar complex (polymastia). Ectopic breast tissue can occur anywhere on the primitive embryonic milk line extending from axilla till groin.¹ Axillary breast tissue is a common variant of ectopic breast tissue and is found in approximately two to six percent of general population.² It is twice as common in females when compared to males.³ Carcinoma is more common occurrence in ectopic breast tissue followed by inflammatory changes and fibroadenoma.^{3,4} Thus fibroadenoma of ectopic breast tissue is a rare entity and proper evaluation is required to rule out any chances of neoplastic changes

II. Case Report

A 40 years old female came to our outpatient department after noticing a swelling in right axillary region near the tail of the breast since 1 year. Swelling is not associated with pain, tenderness and local rise of temperature. On Examination, a single 2.4*1.9 cm firm, mobile, non tender, well circumscribed rubbery lump was found in subcutaneous plane, well demarcated borders and freely mobile in vertical and horizontal planes. Skin over and around the swelling is normal. No discharge or opening found over the swelling. No engorged veins. Bilateral breasts and left axilla is normal. No history of similar swellings or other breast diseases in the family. No bladder and bowel abnormalities. All other systems are normal. Provisional clinical diagnosis of lymphadenopathy was made. Fine needle aspiration cytology was done which suggested the swelling as fibroadenoma of ectopic breast tissue. Routine surgical workup was done which did not reveal any abnormalities. Excision and biopsy was done (Figure 1). Histopathological examination was suggestive of fibroadenoma (Figure 2 and 3). No evidence of malignancy and no lymph node structure identified. Considering the above features and in correlation of the FNAC a diagnosis of —fibroadenoma of ectopic breast tissue was made

III. Discussion

Polymastia is a term that is used to describe the presence of more than two breasts in human beings it is also known as supernumerary breast, accessory breast or ectopic breast tissue (EBT). Ectopic breast tissue develop along milk line or Mammary milk lines which represent two ectodermal thickenings which grow on either sides of the embryo during the 6th week of development. They extend from axilla till the groin. As the development precedes most of them disappears except for the two mammary ridges in the pectoral region which later develop into normal breasts. Ectopic breast usually occurs along the "milk line" or mammary line.⁵ Failure of any portion of the mammary ridge to involute can lead to ectopic breast tissue either with nipple areolar complex i.e. polythelia or without nipple areolar complex i.e. polymastia.⁵ Polymastia occurs due to regression of ectodermal element of the skin but a normal proliferation of mesenchyme.⁶

EBT may occur unilaterally or bilaterally. The incidence of ectopic breast is 1-6% in the general population.⁷ Approximately 67% of accessory breast tissue occurs in the thoracic or abdominal portions of the milk line often just below the infra mammary crease, more often on the left side of the body and only 20% of accessory breast tissue occur in axilla, the remaining 13% of these occur anywhere along the milk line.⁶ Ectopic breast tissues have been reported even on the face, foot, perineum and vulva.⁸⁻¹⁰ Uncommon locations, also known as *‘mammariae erraticae’*, include the buttocks, back of neck, flank, upper arm, hip, shoulders and midline of the back and chest.¹¹ Supernumerary nipple can be present at birth, but ectopic breast develop only after hormonal stimulation usually during the puberty, pregnancy or lactation.¹² If axillary accessory breast tissue is connected with outer part of normal thoracic breast tissue then it is called can the axillary tail of Spence. Hence accessory axillary tissue should be isolated tissue in axilla as in our case. In our case, the fibroadenoma was present in the right EBT rather than in any extension of breast tissue into the axilla.¹³

The occurrence of ectopic breast tissues in locations other than the milk line can be explained by two hypothesis. Either it can represent a migratory arrest of breast primordium during chest development or this occurrence can be attributed to its development from the modified apocrine glands.⁶

Carcinomas are common in ectopic breasts. Other presentations include cystic changes, inflammatory changes and fibroadenomas. Ectopic breasts might be associated with an underlying genitourinary and cardiovascular system abnormality.¹² Fibroadenoma of breast is most common cause of breast mass especially in adolescents and young females, however fibroadenoma of ectopic breast tissue is rarely described.¹³ Supernumerary breasts are classified by Kajava in 1915 as follows,

- type I: complete breast with areola and nipple;
- type II: supernumerary breast with nipple only;
- type III: supernumerary breast with breast tissue and areola only;
- type IV: ectopic or aberrant breast tissue only;
- type V: pseudomamma consists of fat with areola and nipple;
- type VI: polythelia (nipples only);
- type VII: areola only (polythelia areolaris)
- and type VIII: patch of hair only (polythelia pilosa).¹⁴ Our case belongs to class IV.

Ectopic breast tissue occurs sporadically, but a hereditary predisposition has also been reported.¹⁵ In most cases, accessory breasts are asymptomatic and are more of cosmetic concern without any symptoms or signs. Ectopic breast tissue can undergo the same physiological and pathological process as the normally located breast. Carcinoma which commonly occurs from ectopic breast tissue has poorer prognosis due to delay in the diagnosis. This delay happens due to a broad differential diagnosis. Differential diagnosis of a axillary swelling include lipoma, sebaceous cyst, vascular lesions, suppurative hidradenitis, cat scratch disease, lymphadenopathy, secondaries in lymphnodes, tuberculosis, axillary tail of Spence, or even a torn muscle belly and malignancies.¹² Fibroadenoma of axillary ectopic breast is present in superficial plane which in contrast to any tumor from axillary tail of Spence which lies deep to the deep fascia. EBT associated with underlying urogenital abnormalities such as hydronephrosis, polycystic kidney and ureteric stenosis.^{16,17} This association can be partly explained by the parallel development of mammary structure and genitourinary system.¹⁸ Cardiac problems such as congenital heart anomalies, high-blood pressure and rhythm disturbances are linked with ectopic breasts.

A thorough examination of the swelling has to be done just like in case of any breast disease by triple assessment to rule out any malignancy. Special attention should be given for the examination of lymph nodes as the malignancies of ectopic breast tissues carry poor prognosis. Evaluation also has to be done to rule out any associated urological and cardiac problems. Both normal breasts must be examined. Ultrasound is used to determine the anatomical location, consistency, vascularity and composition of the mass. FNAC or true cut biopsy helps us in arriving at a more accurate provisional diagnosis which helps us in planning of management. If the lesion is found to be benign, a simple excision is sufficient. If the lesion is suspected to be malignant wide excision along with lymph node dissection has to be done following oncological principles.

IV. Conclusion

In conclusion, when tumours or nodules are found along the mammary line, the presence of breast tissue should be considered during the investigation. Fibroadenoma of ectopic breast is an extremely rare entity. Proper diagnosis and treatment is essential as the carcinoma of ectopic breast tissue which is common and usually carries a poorer prognosis because of the delayed diagnosis. In our case, excision of the fibroadenoma has been done and the patient is on regular follow up.

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Fig 1 Clinical Image

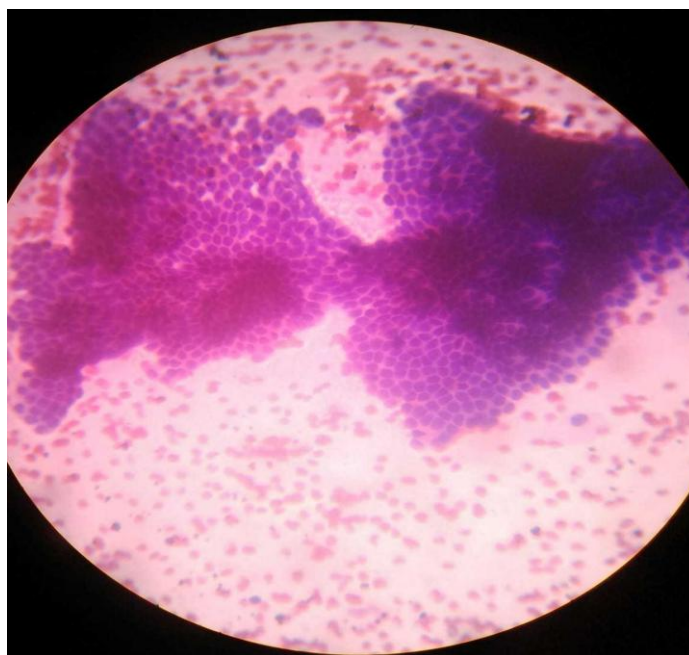


Fig 2 Histopathology