

Mouse in the Axilla- Fibroadenoma of the Accessory Axillary Breast Tissue: A Cytological Diagnosis

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Abstract: The axilla is the most common location for ectopic breast tissue. Fibroadenoma, though commonly occurs in breast, it is rare in ectopic breast tissue. We report a case of fibroadenoma in the axillary accessory breast tissue in a 28 yrs old lady who was referred for fine needle aspiration cytology.

Keywords: Fibroadenoma, axilla, accessory, breast

INTRODUCTION

Ectopic breast tissue occurs in 2 to 6% of the general population and is classically distributed along the embryonic milk line which extends from the axilla to the pubic region [1]. The axilla is the most common site, accounting for approximately 60 to 70% of accessory breast tissue. The diagnosis of ectopic breast tissue is important because this tissue is also subject to the same alterations and diseases, whether benign or malignant, which affect naturally positioned breasts. Although carcinoma of the axillary accessory breast is rare, accounting for 0.3% of all breast cancers, the most frequent condition in the accessory breast is breast cancer followed by mastopathy and fibroadenoma [1].

CASE HISTORY

A 28 years old lady presented to the cytology department with the history of left axillary swelling. She noticed the swelling 2 months back. It had gradually increased to the present size. She had no other specific complaints. On examination there was a firm, freely mobile, non tender, discrete swelling, palpable in left axillary region which measured around 3x3 cm in size. The skin over the swelling was normal (Fig.1). Examination of both the breasts and right axilla were unremarkable. FNA was carried out for the swelling.

Microscopy

Smears studied were highly cellular. The ductal epithelial cells were arranged in varying sized elongated branching sheets and stag horn pattern (Fig. 2). The cells had bland uniform nuclei. The background had numerous single bare bipolar nuclei (Fig. 3). No stromal fragments were identified (Fig. 4). The diagnosis of fibroadenoma was made. Later the patient underwent surgery and the specimen was sent for histopathological examination. Final diagnosis of fibroadenoma was made.



Fig 1: Axillary swelling which measures around 3x3cms



Fig. 2: Scanner view shows branching and stag horn pattern of ductal epithelial cells



Fig. 3: (10x) single bare bipolar cells in the background

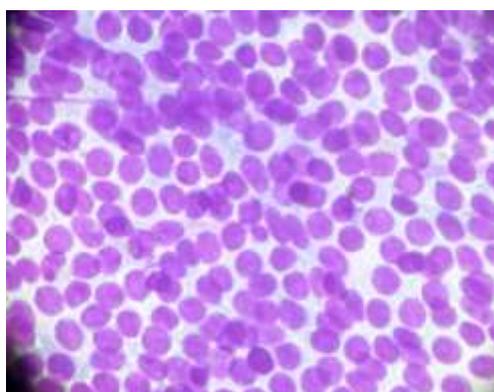


Fig. 4: (40x) Benign looking ductal epithelial cells

DISCUSSION

Most instances of ectopic breast tissue occur along the milk line in the axilla, though they have been reported in areas other than the milk line region like the face, perineum and vulva [2].

Supernumerary breast tissue is well documented in the medical literature, and polymastia is one of its most common presentations. However, reports of benign and malignant tumours in supernumerary breasts are rare [3].

Two hypotheses have been proposed on the embryogenesis of the supernumerary breast. One attributes the anomaly to the failure of regression and displacement of the milk line, while the other believes it develops from the modified apocrine sweat glands. Ectopic breast tissue can undergo lactational changes during pregnancy, and in the presence of a nipple-areolar complex, it can give rise to lactational secretion [2].

In most cases, accessory breasts are asymptomatic and cause nothing more than a visible distension which may resemble a tumour. Sometimes it could cause psychological disturbances in adolescence

and it may give pain and discomfort especially during menstruation, pregnancy, and lactation. The clinical significance of the polythelia and polymastia lies in the fact that apart from the psychological and cosmetic impact, it develops the same pathological changes as the normally located breast tissue such as inflammation, fibrosis, fibroadenoma, cystosarcoma phyllodes, and carcinoma [4].

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, secondaries in lymph nodes, tuberculosis, axillary tail of Spence, or even a torn muscle belly and malignancies [5].

Tumours in supernumerary breast tissue should be diagnosed with the same methods applied to normal breast tissue (mammography, ultrasonography, cytology and biopsy), observing specific indications. However, due to its low incidence, diagnosis may be delayed or even ignored, thus making treatment more difficult [6].

CONCLUSION

Any swelling in the axillary region should be evaluated properly and subjected to routine investigations like FNAC. Fine needle aspiration cytology is a valuable tool in the diagnosis and fibroadenoma should be considered in the differential diagnosis of axillary swellings.

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