

Fibroadenoma of the Axillary Tail: A Common Lesion in an Uncommon Location

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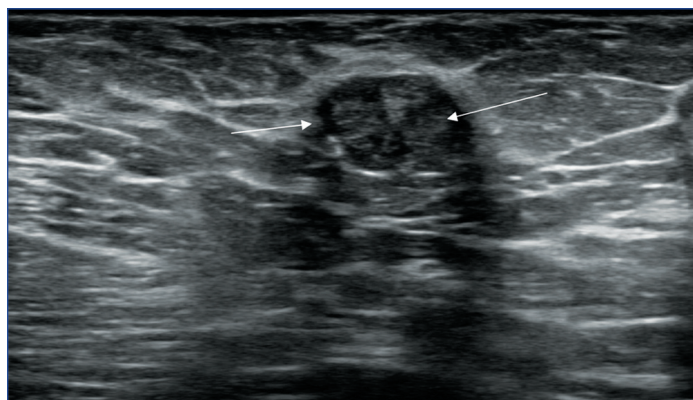
Dear Editor,

A 49-year-old female patient presented with a complaint of a palpable lump in her right axillary region for two months. The lump was gradually increasing in size and associated with slight discomfort. On palpation, it was a smooth, mobile, non-tender lump of approximately 2×2 cm in size in the right axilla [Table/Fig-1]. On sonomammography, the lump appeared well-defined and encapsulated, wider than taller, solid, with a nodular, hypoechoic, ovoid mass measuring 1.9×1.3 cm, showing minimal peripheral vascularity [Table/Fig-2]. X-ray mammogram also revealed a

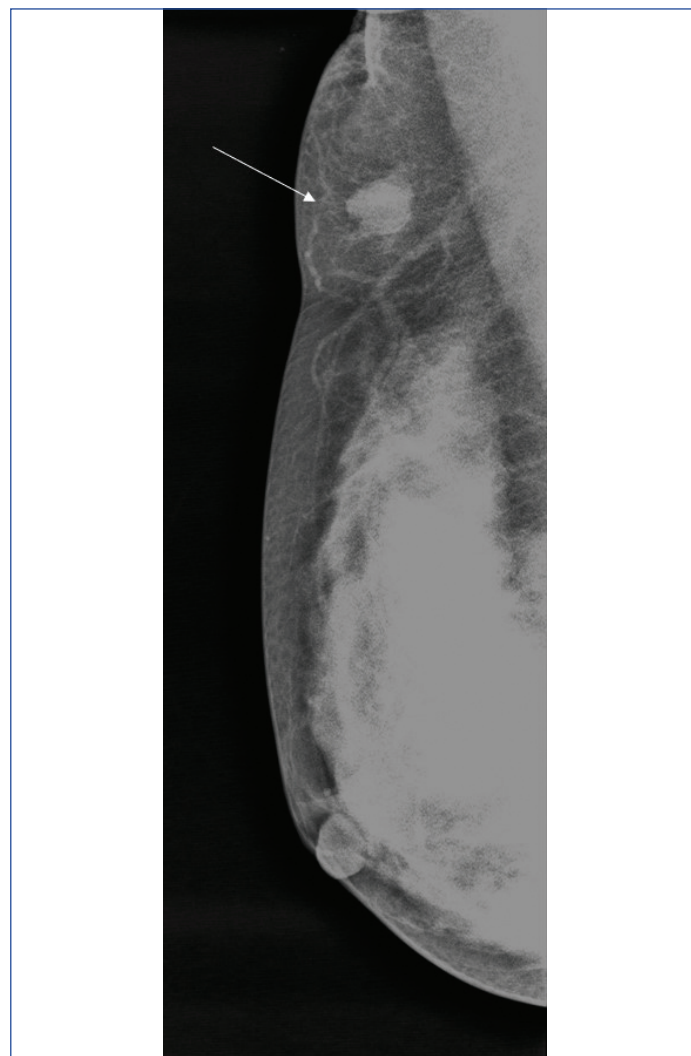
well-defined, oval, dense lesion without any calcification in the axilla, suggestive of fibroadenoma. Various differentials such as lymphadenopathy, lipoma, and sebaceous cyst were considered [Table/Fig-3]. Fine-Needle Aspiration Cytology (FNAC) of the lesion was performed, confirming the diagnosis of fibroadenoma. No similar lesions were noted in the bilateral breast parenchyma or contralateral axilla. The lesion was surgically removed.



[Table/Fig-1]: Clinical photograph showing smooth, well-defined, oval lump of approximate size 2 cm in the right axillary tail.



[Table/Fig-2]: Sono mammography showing well-defined, encapsulated, wider than taller, solid, hypoechoic, ovoid mass suggestive of fibroadenoma.



[Table/Fig-3]: X-ray mammogram showing well-defined oval, dense lesion with circumscribed margin, in the right axillary tail suggestive of fibroadenoma.

DISCUSSION

The embryonic development of the breast begins in the 5th-6th week with the formation of two ectodermal thickenings on the ventral surface of the embryo known as “milk lines.” These extend bilaterally from the mid-axilla to the groin. Accessory breast tissue that develops anywhere other than the two pectoral regions, and its incidence is very rare, ranging from 0.4% to 6% [1]. It most

commonly occurs along the milk lines. The “axillary tail of Spence” is an accessory breast tissue arising from the axilla, connected to the upper outer quadrant of the normal thoracic breast [1].

Masses in the axilla pose a significant challenge for diagnosis due to several differentials that need to be ruled out, such as lipoma, hidradenitis, follicular cyst, lymphadenopathy, hamartoma, and phyllodes tumour. This task is further complicated by the limitation of ultrasound in differentiating normal breast tissue from ectopic breast tissue. Hence, initial mammography/sonomammogram evaluations in such cases must be followed-up with FNAC/biopsy to confirm the diagnosis [2].

Fibroadenoma constitutes the most common diagnosis of a palpable mass in the breast. It is more often seen in young women but can affect any age group. However, the incidence of fibroadenoma occurring in the accessory breast tissue is quite rare. The overall incidence of fibroadenoma is around 2.2%, accounting for approximately 68% of all breast masses. However, less than 40 cases of fibroadenoma occurring in accessory breast tissue have been described in the literature worldwide [3]. Clinically, fibroadenoma is a painless palpable lump commonly found in the subcutaneous tissue of the breast. On palpation, it is a smooth and highly mobile lump that moves away when pressed between the examiner's fingers, aptly named “Mouse in the breast” [4]. Histology showed an encapsulated tumour composed of proliferative stroma with fibromuscular tissue compressing the ducts in between like slits. Papillary, fibro-collagenous, and fibro-myxoid changes may also be present [5].

Ultrasound reveals a well-defined, encapsulated, smooth, solid, hypoechoic, nodular mass resembling a benign lesion. It shows

minimal to no peripheral vascularity on colour Doppler, consistent with the clinical examination that predicts a benign pathology. Intralesional sonographically detectable calcification may or may not be evident in the mass. Even if present, the calcification seen in fibroadenoma corresponds to those of a benign variety. There is no evidence of any architectural loss in the lesion. On mammography, fibroadenomas appear oval and may have a circumscribed or obscured margin. Calcifications may form within involuting fibroadenomas, particularly in post-menopausal women. Typically, calcification starts at the periphery and takes on various morphologies, such as round, coarse, or pleomorphic, most commonly exhibiting a typical “Popcorn” type calcification [6].

Axillary lumps may contain a vast number of pathologies, one of which is fibroadenoma of the axillary tail, which resembles a typical benign lesion. Although rare, it must be considered as an important differential diagnosis in such cases. Ultrasound and mammography are quick and effective modalities that help in the diagnosis and management of these patients.

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