

AXILLARY FIBROADENOMA MIMICKING LYMPHADENOPATHY

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SUMMARY

Ectopic breast tissues are subject to the similar physiological and pathological alterations seen in breast tissues situated in their normal anatomical positions. We report a 34-year old multiparous woman who presented with a right axillary lump of about 1 year duration, for which clinical impression of axillary lymphadenopathy was made and lumpectomy carried out. Histology of excised lump revealed fibroadenoma. We discussed possible pathogeneses and consequences of this lesion.

Key words: breast, fibroadenoma, axilla

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INTRODUCTION

Breast developmental anomalies are not uncommon. Supernumerary breast tissue is well documented in literature.^{1,2} About 1-5% of women and men are reported to have polythelia (supernumerary nipples) and less often, polymastia (supernumerary breasts).¹ These aberrations are most commonly seen along the so-called embryonic milk line, an imaginary line extending from the axilla down to the pubic area on both sides. Polymastia is commonly seen in the axillae.³ The ectopic breast tissues are subject to the same physiological and pathological changes that affect topical breast tissue.^{1,3} Igwegbe and Odike jointly reported a case of lactating adenoma of the vulva in a Nigerian woman, while Baisre *et al* mentioned a fibroadenoma in the same area.^{4,5} Patients typically do not present with a breast mass as their chief complaint; however knowledge of the pertinent anatomy, pathophysiology, and clinical clues is essential.

Fibroadenoma is the most common benign tumour of the female breast and consist of both epithelial and stromal components.⁶ Extra-mammary fibroadenoma, however, is rare. It has been seen in such unusual locations as the axilla, eyelid and arm.^{2,7,8} The rarity of such cases, and the mistaken diagnosis of this case informed our decision to report this case.

CASE REPORT

Mrs. E. N., a 34-year old multiparous woman, had her last confinement about two years earlier. In October 2005 she presented to the surgical outpatient clinic of the Nnamdi Azikiwe University Teaching

Hospital with a complaint of right axillary lump of about one year duration. The lump was not painful, and had not increased significantly in size since first noticed. She had no other complaints. Her family, as well as obstetric and gynecological, history was not contributory. She was not on any drugs. On physical examination, a solitary, freely mobile, non-tender nodule measuring less than 2.0cm in diameter was palpated in the right axilla. The left axilla was free from any lump. Both breasts were relatively symmetrical and had no lumps. Chest x-ray was entirely normal. A clinical diagnosis of 'right axillary lymphadenopathy ?cause' was made. Nodectomy was carried out in November 2005 and biopsy specimen sent for histology

The histology report was that of a specimen consisting of a firm encapsulated grayish-white nodule measuring 1.5x1.0x0.5cm, and having grayish-white cut surfaces. Microscopy showed encapsulated breast tissue composed of proliferated mature glands within equally proliferated fibroblastic stroma. Diagnosis was fibroadenoma. No further treatment was given to patient. She has remained symptom-free 6months after surgery.

DISCUSSION

Things are not always what they seem. Axillary lymphadenopathy is a common finding in our tropical environment. Expectedly, lumps in the axilla are, at the first instance, diagnosed as lymphadenopathy. Other less common causes of axillary lump include skin appendage lesions. For a woman without obvious polymastia breast tumour would have been least in the mind of the surgeon; hence the initial clinical diagnosis. Supernumerary breast tissue is well documented in medical literature.² But most times its presence is not suspected until onset of

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Pathology. Increasing numbers of pathologies in supernumerary breasts are being reported. Fibroadenoma, though very rare, is one of them.² It is a frequent cause of nodules in young women, with highest incidence between the ages of 20 and 30 years of age.¹ Our patient was 34 years old at presentation. This age is not far from the modal age. Moreover, she may have carried this growth for more than one year before presentation. There is the possibility that very many ectopic breast tissues are never observed because they did not develop pathologies. Since malignant neoplasia may also affect these ectopic rests, advocates of breast self examination (BSE) should begin to think of incorporating the axilla (and possibly the entire mammary milk-line) in the area routinely examined. In other words, examination of the breast would be deemed incomplete until the entire milk-line has been examined. This is with the assumption that ectopic breast tissues are related only to the mammary milk-line.

The pathogenesis of axillary fibroadenoma has been a thing of controversy in literature. Most scholars believe it arises from ectopic rest of breast tissue along the embryonic milk-line. However, of late some authors have questioned the notion of embryonic milk-line and described it as a myth.⁹ They opine that fibroadenoma arising in the anogenital region (and by extension other places) more accurately develop from cutaneous mammary-like glands of such areas. These are eccrine glands that transform into apocrine glands with the capacity to form breast lobules. This idea of gland metaplasia rather than breast tissue ectopy more easily explains the occurrence of fibroadenomas in such out-of-the-way locations as the prostate, gall bladder, arm and eyelid.^{7,8,10,11} Despite this we believe that the traditional concept of origin from ectopic mammary tissue along the milk-line still holds some water. It is not for nothing that most of the reported extramammary fibroadenomas have locations along this milk-line. It is possible there is a combination of both factors in the pathogenesis. The contribution of each factor needs to be determined.

Whatever the case may be, we join other researchers in highlighting the necessity for clinicians to get acquainted with these mammary-like glands since they can become the origin of serious morbidities such as lactating adenoma, intraduct papilloma, sclerosing adenoma, phyllodes tumour, Paget disease, ductal carcinoma, invasive adenocarcinoma, amongst others.⁹ Tumours or nodules occurring in various locations may as well be of breast tissue origin, even when they are

outside the milk-line. This again brings to the fore the central role of histology in the management of tumours.

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