

**FIBROCYSTIC CHANGE IN AXILLARY POLYMASTIA WITH ABSENT NIPPLE:  
REPORT OF A CASE AT FEDERAL MEDICAL CENTRE GOMBE NIGERIA**

Dauda AM<sup>1\*</sup>, Ojo EO<sup>2</sup>

1. Department of Pathology, Jos University Teaching Hospital Plateau state, Nigeria
2. Department of Surgery Jos University Teaching Hospital Plateau state, Nigeria

**Correspondence**

Dauda M Ayuba. Department of Pathology, Jos University Teaching Hospital Plateau state, Nigeria

Email: mdayuba10th@yahoo.com

Dauda AM, Ojo EO. Fibrocystic change in axillary polymastia with absent nipple: report of a case at Federal Medical Center Gombe Nigeria. *Adv Lab Med Int.* 2011; 1(2): 21 - 24.

**ABSTRACT**

Polymastia usually occur along the embryonic milk lines extending from the axilla to the groin. Polymastia in female patients has been reported to manifest during pregnancy or lactation. We report a 19-year-old adolescent with axillary supernumerary breast. She had painful axillary swelling which was misdiagnosed as infected lipoma clinically. The mass in the right axilla was excised with pathologic report of supernumerary breasts with fibrocystic changes. When a mass is located along the milk line, the possibility of the presence of breast tissue should be considered.

**Key words:** Polymastia, axillary

**INTRODUCTION**

Accessory Breast tissue is a relatively common occurrence that has a high incidence of being misdiagnosed in clinical medicine. Various diagnoses of such structures include lipoma, lymphatic malformation, lymphadenitis, and sebaceous cyst<sup>1-2</sup>. Accessory breast is a well documented anomaly of the Breast, and commonly presents along the embryonic milk line extending between the axilla and groin. However, aberrant breast tissue has been reported to arise from extra sites, including the face, posterior and or lateral thigh, perineum, as well as the midback<sup>3-6</sup>. The prevalence of accessory breast tissue has been shown to be dependent on a few factors, including gender, ethnicity, geographical area, and inheritance. Overall, the occurrence averages between 0.22 percent and 6 percent of general population<sup>7-8</sup>. The incidence of ectopic breast tissue is higher in Americans, Japanese, Israeli Jews, and Arabs<sup>9-10</sup>, than in Europeans, where very low frequency was reported<sup>11</sup>. The most common sites being the chest wall, vulva and rarer cases have been recorded in the axilla and face<sup>12-13</sup>. In respect of the sites accessory breast tissue

merits further investigation by the clinicians as this tissue has the ability to undergo all the pathological changes that are characteristic of the normal breast and the presence of ectopic breast tissue may indicate underlying congenital anomalies. The present article reports a case of fibro cystic change in an infected supernumerary breast of the right axilla in a 19 year old female that was erroneously diagnosed as lipoma clinically at the Federal Medical Centre, Gombe north eastern Nigeria.

## CASE REPORT

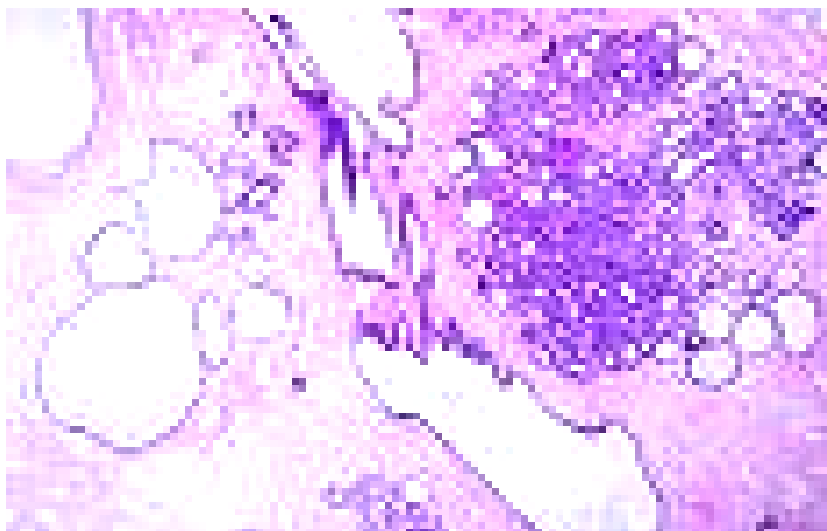
A. M is a 19 year old primipara who presented at the surgical outpatient Department with an initially painless right axillary lump first noticed 2 years earlier. She presented to the hospital on account of pain noticed over the swelling a day before presentation. Examination revealed a young woman with a mobile, lobulated, soft, subcutaneous swelling measuring about 5cm in diameter. There was an hypereamic, warm and tender 1cm wide area on the medial aspect of the swelling. She had normally situated pendulous breast tissues bilaterally. There was no axillary lymphadenopathy and her temperature was 37.4 °c. PR 86 beat/min, regular and of good volume. Bp was 130/80mmHg. She had a packed red blood cell of 35%, normal urinalysis and WCC of 4,600/mm<sup>3</sup> with normal differential counts, her hormonal status (progesterone 16 ng/ml and estrogen 380 pg/ml.) are within normal limit. She was assessed as a case of infected subcutaneous lipoma and commenced on a combination of Cloxacillin and Ampicillin antibiotics before excision biopsy after which patient was lost to follow up.

The pathology report of the specimen however read as follows.

Macroscopy showed a mass of fibrofatty tissue measuring 3cm x 3cm x 1cm. Slicing reveals yellowish grey surfaces.

Microscopy sections showed breast tissue comprising of proliferating ducts and ductules with some of the ducts appearing cystic. These are disposed in fibrofatty stroma. See Figure 1.

Figure 1. Photomicrogram of axillary swelling Showing breast tissue with cystic dilation of ducts and ductules H&E X 40.



## DISCUSSION

Polymastia which is used synonymously as supernumerary or, accessory breast was once thought to be a symbol of increased fertility and femininity as ancient goddesses of fertility had row upon row of breasts on their chests <sup>14</sup>.

Although the majority cases of polymastia in female patients have been reported to manifest during pregnancy or lactation <sup>15</sup>. Our case presented on account of pain from suspected infected lipoma and she never gave any history of development of swelling during puberty or lactation. Therefore unless there are obvious symptoms of lactation or the assistance of further imaging studies such as mammography and breast ultrasound, the diagnosis is often confused with subcutaneous lipoma in unsuspected cases especially if there is absent areola or nipple. However, this diagnosis is important because supernumerary breast tissue is subject to the same pathologic changes that occur in normally positioned breasts and it can also be seen in combination with many other anomalies <sup>2</sup>. Our patient had a fibrocystic change which is in keeping with Fama et al where five neoplastic lesions and 25 fibrocystic mastopathies were detected in their specimens <sup>16</sup>. However, other documented pathologies include fibroadenoma <sup>17</sup> and carcinoma <sup>18</sup>. Familial tendencies via an autosomal dominance inheritance with incomplete penetrance or X-linked dominance have been noted but no such history was given in this case. Although less usual, this pathology has also been reported in the males <sup>4</sup>. Misdiagnosis of ectopic breast tissue is common, but where it is correctly diagnosed surgical excision or liposuction could be carried out for pathological concerns or cosmetic disfigurement.

In conclusion it should be emphasized that when a mass is located along the milk line, the possibility of the presence of breast tissue should be considered. The suspicion should be heightened when associated with cyclical changes during pregnancy, menstrual flow or lactation.

Therefore a need for proper clinical assessment coupled with histological evaluation of tissue specimens must be emphasized.

## REFERENCES

1. Decholnoky T. Accessory breast tissue in the axilla. NY state J Med. 1951; 19: 2245-8.
2. Greer KE. Accessory axillary breast tissue. Arch Dermatol. 1974; 109: 88-9.
3. Basu S, Bag T, Saha KS, Biswas PC. Accessory breast in the perineum. Trop Doc. 2003; 33: 245.
4. Camisa C. Accessory breast on the posterior thigh of a man. J Acad Dermatol. 1980; 3: 467-9.
5. Koltuksuz U, Ayoden E. Supernumerary breast tissue: A case of pseudomamma on the face. J Pediatr Surg. 1997; 32: 1377-8.
6. Leung W, Heaton JPW, Morales A. An uncommon urologic presentation of supernumerary breast. Urology. 1997; 50: 122-4.
7. Scantan KA, Propeck PA. Accessory breast tissue in an unusual location. AJR. 1996; 49: 149-51.
8. Schmidt H. Supernumerary nipples: prevalence, size, sex and side predilection: a prospective clinical study. Eur J Pediatr. 1998; 157: 821-3.

9. Gilmore HT, Milroy M, Mello BJ. Supernumerary nipples and accessory breast tissue. *S D J Med*. 1996; 49: 149-51.
10. Jaber L, Merlob P. The prevalence of supernumerary nipples in Arab infants and children. *Eur J Pediatr*. 1988; 147: 443.
11. Gray SW, Skandalakis JE. *Embryology for Surgeons: Embryological Basis for the Treatment of Congenital Defects*. Philadelphia, London and Toronto: WB Saunders Company, 1972.
12. O'Hara MF, Page DL. Adenomas of the breast and ectopic breast under lactational influences. *Hum Pathol*. 1985; 16: 707-712.
13. Aughsteeen AA, Almasad JK, Al-Muhtaseb MH. Fibroadenoma of the supernumerary breast of the axilla. *Saudi Med J*. 2000; 21: 587-9.
14. 5. Grossl NA. Supernumerary breast tissue: historical perspectives and clinical features. *South Med J*. 2000; 93: 29-32.
15. Wang JJ, Yeung L, Taur CP, Sy LB, Chou TY, Leu FJ. Axillary supernumerary breast in a female adolescent: report of one case. *Acta Paediatr Taiwan*. 2005; 46: 235-8.
16. Fama F, Florio G, Villar MA, Caruso SA, Barresi R, Mazzei V, Pollicino A, Scarfo P. Breast abnormalities: a retrospective study of 208 patients *Chir Ital*. 2007; 59: 499-506.
17. Aughsteeen, A. A. Almasad, J. K. Al-Muhtaseb, M. H.. Fibroadenoma of the supernumerary breast of the axilla. *Saudi Med J*. 2000; 21: 587-9
18. Cheong JH, Lee BC, Lee KS. carcinoma of the axillary breast. *Yonsei Med J*. 1999; 40: 290-3.