

**GIANT LIPOMA – BREAST AS A RARE SITE OF OCCURRENCE****MUSTAPHA Z<sup>1</sup>, TAHIR N<sup>2</sup>, AMEADAJI M<sup>1</sup>, MINOZA K<sup>3</sup>, PINDIGA UH<sup>4</sup>, OKEDAYO M<sup>1</sup>**

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**SUMMARY**

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Lipomas are the most frequent mesenchymal soft tissue tumors, but breast lipomas are usually small, asymptomatic and incidental findings on mammograms. This benign neoplasm can be treated by simple excision. We report a rare case of a Giant breast lipoma in a 30 year old woman, histologically confirmed by ultrasound guided core tissue breast biopsy.

**KEYWORDS:** Breast, giant, lipoma, mammogram

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**INTRODUCTION**

A lipoma is a neoplasm of adipose tissue, composed of mature lipocytes<sup>1</sup>. Breast lipomas contain fat only, with no fibroglandular elements and are invariably benign, encapsulated, small and quite common, affecting women of all ages. The giant variety is however very rare<sup>2,3</sup>.

Breast lipomas are usually small, asymptomatic and incidental findings. Giant lipomas may present with a painless increasing growth of one breast<sup>3</sup>; which on examination may appear asymmetric from the normal side<sup>4</sup>. They are usually soft and

their gross position should correspond to the mass seen on a mammogram<sup>2,5</sup>. Imaging of small breast lipomas can be difficult and is best done by placing a metallic breast marker over the palpable mass, and despite this, many can be mammographically occult<sup>6</sup>. A breast lipoma is described as giant if it measures greater than 10cm in any one of its diameters or weighs a minimum of 1000grams<sup>7,9</sup>. Giant breast lipomas may also prove difficult to image especially when within a predominantly fatty breast. When seen on a mammogram, no additional imaging is required<sup>6</sup>.

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This report presents a rare case of a giant lipoma of the breast, which to the best of our knowledge is the first reported in our locality of Maiduguri, northeastern Nigeria.

**CASE SUMMARY**

F.A is a 30 year-old multi-parous woman who was referred to the mammography unit of Radiology department, University of Maiduguri Teaching hospital (UMTH) from a peripheral hospital with a year's history of left breast swelling which had recently increased in size. The mass was

painless, however the patient complained of increased heaviness of that breast. There was no family history of breast cancer.

On examination, the patient was a young healthy looking lady, not in any form of distress, but the left breast was slightly larger than the right. Though a mass was barely palpable, a baseline screening mammogram using a GE DMR-Senograph mammography machine and craniocaudal (CC) and medio-lateral oblique (MLO) views of both breast were obtained (figures 1 & 2 ) and showed scattered fibroglandular densities ( with 25% - 50% glandular tissues present). There were no micro-calcifications or architectural distortion suggestive of malignancy bilaterally. However, a large totally radiolucent area was in the superior-lateral left breast measuring 18cm X 10cm and displaced the fibroglandular tissues medially and inferiorly. The overlying skin and nipple were normal bilaterally. A BI-RADS category of 0 was given.

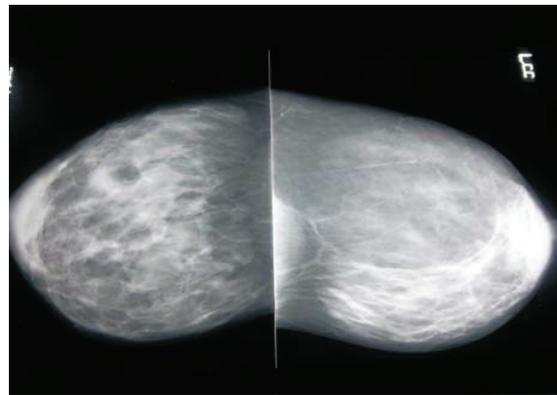
Additional mammographic views of the mass (90° lateral & spot compression) were done to further characterize the mass and to rule out the possibility of a malignancy. It showed the mass to be completely lucent with only a small focus of vascular calcification and an oil cyst.

Sonomammogram of the mass showed a huge, wider than taller hypoechoic mass within the outer upper quadrant of the breast. An ill-defined uniform margin was also visualized which separated this mass from the remaining normal scattered fibroglandular breast tissue. The axilla, overlying skin and nipple were sonographically normal. A final BI-RADS category 3 for the left breast and BI-RADS

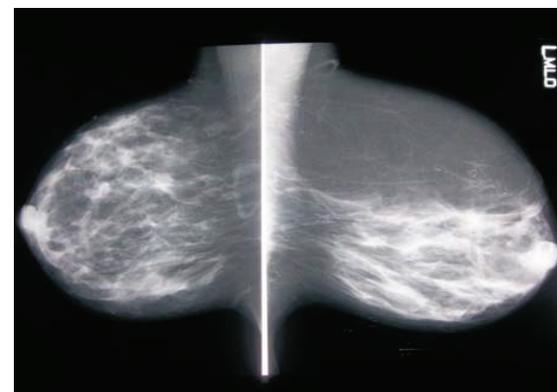
category 1 for the right was given. The patient was given a 6 month follow-up.

All mammographic and sonographic studies were repeated for only the left breast at follow-up. An increase in size of the mass from 18 X 10cm to 21cm X 14cm in diameter was noted.

At this point, a decision was taken to biopsy. An Ultrasound-guided core tissue biopsy using a 14 gauge BARD biopsy apparatus was done. Histology showed the tissue to be composed of mature adipocytes and a diagnosis of a lipoma was made.



**Figure 1:** CC mammograms, lipoma in left breast



**Figure 2:** MLO mammograms with Giant lipoma in left Breast

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## Giant Lipoma of the breast

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She was referred to the surgeons who recommended an excision based on the rate of growth of the mass. The patient was given a 3 month follow-up appointment but failed to return.

### DISCUSSION

Giant breast lipomas are rare and normally slow growing soft tumors, not attached to the skin or deeper tissues<sup>4,10</sup>. Most lipomas of the breast have a diameter of about 2cm and rarely grow beyond 10cm. Giant lipomas of the breast occur infrequently and occasionally may enlarge rapidly to become huge masses<sup>11</sup>.

Typically most lipomas of the breast are small, asymptomatic and coincidental discoveries on mammograms. When palpable, they are often small, oval, soft and painless masses with rarely additional symptoms<sup>2,4</sup>. Our patient presented with a fast growing painless breast mass which raised the concern that we may be dealing with a malignant lesion of some form despite the absence of clinical features to suggest same.

Mammography is the mainstay and preferred method of imaging lipomas of the breast as their appearance of totally radiolucent lesion and absence of calcifications is diagnostic. Lipomas may be difficult to diagnose in large or postmenopausal breast due to the normal fatty background in such patients<sup>4, 5, 10, 12</sup>. Though our patient had large breasts, she was premenopausal and her mammograms showed scattered fibroglandular parenchymal densities which may have aided in the ease of detecting this mass which in a completely fatty background, may have been missed. No microcalcifications were noted in the mammograms of the patient presented. On

sonomammography, a circumscribed hypoechoic oval mass with ill-defined margins was seen making this study unhelpful at confirming a lipoma. The usual features of a lipoma on ultrasound have been a rounded or oval isoechoic to slightly hyperechoic mass with it appearing hypoechoic only occasionally. Breast lipomas are not usually biopsied. However, if rapidly enlarging, a biopsy is then strongly indicated<sup>13</sup> as was the case in our patient.

The two main differentials we attempted to exclude were liposarcomas and pseudolipomas. Liposarcoma is an extremely rare, fast growing lesion and the only fat containing malignancy known<sup>2</sup>. While most are believed to arise de novo or as malignant components of another process such as phylloides tumors, they are never as a result of malignant transformation of a lipoma,<sup>2, 12, 13</sup>. Mammographically, they are lobulated, high density and usually indistinct<sup>2</sup>, a sharp contrast to the appearance of breast lipomas. Pseudolipomas are uncommon masses with clinical features of a subcutaneous lipoma which are actually formed by and may conceal a slow growing breast carcinoma<sup>3</sup>. Though mammographic features of our patient were dissimilar to that of liposarcoma which is usually a lobulated hyperechoic mass, the sono-mammographic findings of our patient's breast mass were not.

Management of giant breast lipomas often requires surgical intervention for cosmetic reasons or to alleviate the symptoms of discomfort and heaviness<sup>4</sup>. Our Patient was referred to the surgeons for excision of the Lipoma based on their recommendation.

In conclusion, a rare case of a giant breast lipoma seen in our environment was reported. Although difficulties may be encountered in reaching a conclusive diagnosis in suspected cases of breast

lipoma due to other fat containing lesions in the breast, radiological and histologic investigations have proved to be of immense importance in reaching a conclusive diagnosis in the index case. ■■■

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