

CASE REPORT

Angiolipoma of Breast: A Surgical Surprise

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Abstract:

Lipoma can occur anywhere in body, but an angiolipoma of the breast is rare. Lipoma of breast usually causes diagnostic dilemma, because of fatty composition of breast. It is a soft tissue tumor of benign variety. Treatment includes simple excision.

Keywords: Angiolipoma, Excision, Histopathology

Introduction:

Lipoma of breast is a rare entity. Lipoma of breast can cause diagnostic dilemma by clinical, radiological and pathological means. Rare variants of lipoma can occur in breast (Angiolipoma), which is a vascular tumour. Angiolipoma is an uncommon variant of lipoma, representing 5-17% of all benign fatty tumours [1,2]. Angiolipoma was established as a pathologic entity by Howard and Helwig [3]. FNAC can miss the diagnoses because of the normal fatty tissue. In most cases, sonography shows the tumour to be a homogeneously well-circumscribed hyperechoic lesion that is usually benign [4]. Lipoma (angiolipoma) might be a difficult differential diagnosis. Treatment includes simple excision.

Case History:

A 42 year old woman presented with a solitary, painless lump in the left breast since 16 years, which was progressively increasing in size to

attain the present size. It started at the upper outer quadrant of the breast. There was no nipple discharge or any skin changes. No history of loss of weight. The family history was not prominent. A differential diagnosis of Giant fibroadenoma and lipoma was made in view of its long standing duration.

Local examination revealed a well circumscribed, mobile, soft swelling measuring 12×8 cms, palpable mass in the left breast. Skin was pinchable and normal. The nipple and areola complex were normal. The swelling was not attached to the chest wall. No axillary lymph node enlargement was present.

On the ultrasound examination, indistinct, homogeneously hyperechoic intraparenchymal mass without any definite internal vascularity, was detected, extending into the subcutaneous tissue.

Fine Needle Aspiration Cytology (FNAC) of the breast swelling revealed a few fragments of mature adipose tissue, but repeat smears showed mature adipose tissue, inconclusive of the lump.

With the above diagnosis of lipoma and fibroadenoma patient was taken for surgery. No other investigations were done in our Hospital. The patient underwent excision of the breast mass in Fig. 1a, b and c.



Fig.1a: Shows Preoperative, Fig.1b: Shows Intraoperative, Fig.1c: Shows Postoperative



Fig. 2a: Showing Gross Specimen, Fig.2b: Microphotograph

Histopathological examination revealed a well circumscribed and encapsulated lesion composed of mixture of mature adipose tissue and network of capillaries shown in Fig. 2a and b.

The final diagnosis of an angiolipoma of the breast was confirmed.

Discussion:

Lipomas are encapsulated proliferation of mature adipocytes. The cause of angiolipoma is unknown. Breast angiolipomas may manifest as asolitary mass or multiple breast masses. There is no typical mammographic appearance of angiolipomas. The key to the diagnosis is suggested by the homo-

genously echogenic sonographic appearance, which is unusual for breast masses. However, the differential diagnosis for masses with increased echotexture includes focal acute haemorrhage or acute haematoma, focal fibrosis, haemangioma, angiolipoma, spindle cell lipoma and malignancy. The histologic appearance of angiolipoma in the mammary subcutaneous tissue does not differ from comparable lesions in other subcutaneous locations [5].

Microscopically angiolipomas consist of mature fat cells separated by a branching network of small vessels; the proportion of fatty tissue and vascular

channels varies, but usually the vascularity is slightly more prominent in the subcapsular areas.

The World Health Organization (WHO) 2002 classification of tumours of soft tissue and bone sub classified angioliipoma into two categories : low-vascular density and cellular [6]. The cellular subtype has been reported to comprise 25-30% of all lesions [7,8]. The differential diagnosis of this lesion depends on the density of vessels. Some tumors are highly cellular and composed entirely of vascular channels (cellular angioliipoma)[9]. Failure to diagnose cellular angioliipoma may potentially lead to diagnostic pitfalls that include

angiosarcoma and Kaposi's sarcoma, better recognized entities in the mammary region[10]. Although treatment is excision of non-infiltrative variety, the infiltrative variety that may occur elsewhere in the body, wide excision may be needed to prevent recurrence[2].

Conclusion:

Angioliipoma of breast may present as a diagnostic challenge clinically, radiologically and pathologically. Repeat aspirations by FNAC can be done for diagnosis. All excised specimen should be sent for histopathological examination.

References

1. Sibala JL, Chang CHJ, et al. CT of Angioliipoma of the Breast. *Am J Roentgenol* 1980; 134: 840-841.
2. Weinstein SP, Conant EF, Acs G. Case 59: Angioliipoma of the breast. *Radiology* 2003; 227:773-75.
3. Howard WR, Helwig EB. Angioliipoma. *Arch Dermatol* 1960; 82:924-31.
4. Mintz AD, Mengoni P. Angioliipoma of the breast: sonographic appearance of two cases. *J Ultrasound Med* 1998; 17:67-9.
5. Benign mesenchymal neoplasms. In Rosen PP, editor. *Rosen's Breast Pathology*. 2nd (edt). Philadelphia: Lippincott Williams & Wilkins; 2001. pp. 803.
6. Drijkoningen M, Tavassoli FA, et al. WHO Classification of Tumors: Tumors of the Breast and Female Genital Organs. Lyon, Frans; IARC Press. 2003:93.
7. Kryvenko ON, Chitale, DA, et al. Angioliipoma of the Female Breast: Clinicomorphological Correlation of 52 Cases. *Int J Surg Pathol* 2011; 19: 35-43.
8. Chiu A, Fiert N, et al. Letter to the editor. *Breast J* 2002; 8:182-183.
9. Benign lipomatous tumors. In: Weiss SW, Goldblum JR, editors. *Enzinger and Weiss's soft tissue tumors*, 5th (ed). St. Louis: Mosby; 2008: 437-40.
10. Kahng HC, Chin NW, Opitz LM, et al. Cellular angioliipoma of the breast: immunohistochemical study and review of the literature. *Breast J* 2002; 8(1):47-49.

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