

HAMARTOMA OF THE BREAST: AN UNUSUAL BREAST LESION

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ABSTRACT

Hamartoma of breast is one of a rare pathological lesion. Clinically, this is diagnosed out of exclusion, other reason for breast lump.

KEYWORDS

Hamartoma of Breast.

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INTRODUCTION: We report this case of a patient with a lump in the breast which confirms to be hamartomatous lesion in the breast. This is one of the rare case presented as a lump in the breast.

Breast hamartoma is referred as fibroadenolipoma or adenolipoma. It is a rare benign breast lesion presented as lump in the breast. It commonly occurs in women older than 35 years of age. Clinically, they present as soft, painless, progressively increasing lumps in the breast. They are also referred to as lipofibroadenomas, fibroadenolipomas or adenolipomas based on their predominant components. They typically occur in women older than 35 years of age. While it can present as a painless soft lump, it may also present as unilateral breast enlargement without a palpable localised mass lesion. It results from a benign proliferation of fibrous, glandular, and fatty tissue (hence fibro-adenolipoma) surrounded by a thin capsule of connective tissue. All the components found in the normal breast tissue are present and hence the term hamartoma.

Macroscopically, hamartomas are slightly larger and softer than common fibroadenomas. They are usually well-defined, whitish, pinkish and fleshy, with islands of yellow fat tissue. Histologically, they exhibit pushing borders with a Pseudo-encapsulation, and consist of a combination of variable amounts of stromal and epithelial components. We present a rare case of breast hamartoma.

CASE REPORT: We report a 46-year-old women with complaints of lump in the left breast for 3 months. It is insidious in onset, slowly progressing. No history of pain. No other specific complaints. On physical examination, we found out a nontender 3 x 3 cm lump in the upper quadrant of the left breast. Intrinsic mobility is slightly restricted. There is no palpable lymphadenopathy in the left breast.

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Fig. 1: Excision of the Hamartoma

USG Left breast revealed spiculated heterogeneous mass, suggested mammography. Mammography/CT – spiculated heterogeneous mass 1.6 cm x 1.3, lower margin not visualised and it is hypovascular.



Fig. 2: Mammography showing Heterogeneous Lesion

FNAC: Scanty haemorrhagic material which is inconclusive. Other investigations are within normal limits. Our patient underwent surgical excision. On exploration, the lesion was extending into the muscular plane.

Pathologist reported a nodular yellowish mass measuring 11.5×8×3.5 cm. External surface is smooth bosselated with a thin capsule seen all around. Cut surface is predominantly yellowish lobulated and soft to firm with a central identified grey white firm areas measuring 7×2.5×2 cm. Few cystic spaces are also noted.



Fig. 3: Macroscopic Appearance showing Smooth Bosselated with a thin Capsule

Microscopically section shows sheets of mature adipose tissue fragments interspersed with thin blood vessels. In foci, distorted mixture of ductolobular units is seen with spindle smooth muscle proliferation. Also seen are foci of breast parenchyma displaying stromal fibrosis and adenosis, columnar cell hyperplasia and few cystically dilated ducts with usual ductal hyperplasia. There is no evidence of ductal carcinoma in situ or malignancy.

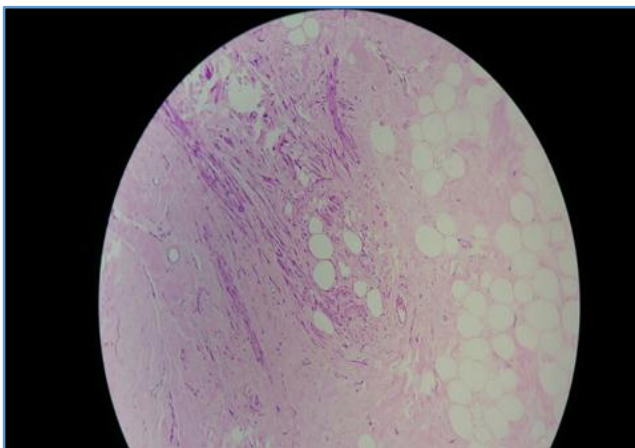


Fig. 4: Macroscopic Picture showing Ductolobular units Interspersed with Spindle Smooth Muscle and mature Adipose Tissue

Impression: Mammary hamartoma with fibrocystic changes, left breast.

DISCUSSION: Mammary hamartomas are well encapsulated lesions composed of glandular and fibrous tissue and fat in varying proportions.^[1] It occurs in women aged more than 35 years of age with a incidence of 0.1 to 0.7%.^[2,3,4,5] Mammary hamartomas are first described by Arrigoni et al in 1971.^[1] He reported them in a study of patient whose breast lumps clinically and grossly resembled fibroadenomas. On clinical examination, they may manifest as large, mobile, and soft to firm masses. A hamartoma may be indistinguishable from a fibroadenoma by imaging or misdiagnosed as a fibroadenoma on pathologic examination after core biopsy.

Hamartoma has the typical mammographic appearance of well-circumscribed, round to oval coating fat and soft tissue densities with a thin, radiopaque pseudocapsule.^[6] Lobulated densities are dispersed within the encapsulated fat, described as a "slice of salami".

Breast hamartoma has a wide variation of sonographic appearance. The ultrasound shows sharp definition and displacement of surrounding structures. It contains sonolucent fat and echogenic fibrous components with a heterogeneous internal echo pattern.^[7,8] FNAC may be helpful in preoperative diagnosis of hamartoma of breast. The conclusion of studies done by Herbert et al showed that the finding of intact lobular units and a relative paucity of stroma may suggest the diagnosis of hamartoma.^[9] Upon gross examination, hamartomas are typically well-demarcated, occasionally lobulated lesions with smooth contours and an often rubbery greyish-white to yellow cut surface, resembling a fibroadenoma or a lipoma.^[8] The two common variants of breast hamartoma are adenolipoma and chondrolipoma.

Adenohibernoma and myoid hamartoma are rare variants of hamartoma. Microscopic examination, Arrigoni et al identified mammary glandular tissue with a prominent lobular arrangement, fibrous Stroma and fat in variable proportions. The lesion generates the impression of a breast within a breast.^[1] Usually, ductal hyperplasia, apocrine metaplasia, calcification, stromal giant cells with adenosis may be associated with hamartoma.^[10]

Although hamartomas are usually benign, malignant transformation is possible and intraepithelial neoplasms and ductal intraepithelial neoplasms have also been reported. No single diagnostic approach can confidently diagnose breast hamartoma. It is important to correlate by clinical examination, imaging and pathological analysis to make appropriate diagnosis.

CONCLUSION: Breast hamartomas are rare benign breast lesions. They present as soft painless, progressively increasing lumps in the breast. It results from benign proliferation of fibrous, glandular and fatty tissue surrounded by a thin capsule. Since it occurs more commonly in the middle aged women it poses a clinical challenge to exclude malignant lesion.

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