

Chondrolipoma Breast- An Uncommon Presentation

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ABSTRACT

Lipoma is a benign soft tissue tumour of adipose tissue. Most of the time lipoma is diagnosed based on clinical features. Histopathological diagnosis needed in certain cases. There are many subtypes of lipomas. One of the rare variant of lipoma is chondrolipoma. Chondrolipoma is a benign mesenchymal tumor of adipose tissue which composed of both adipose tissue and true hyaline cartilage. This is a case report of 58 years old female presented with lump in the right breast which has a diagnostic difficulty and finally diagnosed as chondrolipoma of breast. This case is reported due to rarity in breast.

KEY WORDS : Chondrolipoma, Adipose tissue, Benign mesenchymal tumour, Hyaline cartilage, Excision and Biopsy

Case Report

A 58 years old female patient admitted with complaints of lump in the right breast for 11 months duration, which was gradual, progressive. No history of pain in the lump or nipple discharge. No history of any constitutional symptoms. On examination patient was conscious, oriented, and afebrile. Examination of both breast revealed no asymmetry, no nipple retraction. On palpation a single lump of 4x3 cm present in the lower and outer quadrant. Mass is hard in consistency, mobile along with breast tissue, and non-tender.

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Mass was not attached to underlying surface or pectoral muscle. Nipple areolar complex found to be free. Contralateral breast and both axilla found to be free. clinically patient was diagnosed as carcinoma breast.

Sonamammogram showed lump of 4x3cm present in right lower and outer quadrant with pleomorphic microcalcifications with BIRADS IV (Fig. No.1), suggested histopathological examination. Fine needle aspirations showed no evidence of malignancy. Trucut biopsy shows no evidence of malignancy. Other investigations found to be normal. As the mass was less than 4 cm with negative core needle biopsy, planned for excision biopsy. Excision biopsy tumor of 4x3cm present in the right lower and outer quadrant. Mass was not adherent to underlying structures. Cut sections showed yellowish fatty tissue with multiple small calcifications with capsule (Fig. No.2). Histopathological examination showed mature adipose tissue with hyaline cartilage. Fibrocartilage seen. Few areas showed calcification (Fig. No.3).

Discussion

Lipoma presents with variety of presentation. It can present as adenolipoma, angioliipoma, chondroid lipoma, hibernomas, neuroliipoma, fibrolipoma, pleomorphic lipoma. Chondrolipoma is a benign mesenchymal tumour of adipose tissue, which composed of adipose tissue and true mesenchymal hyaline cartilage [1-2]. Chondrolipoma is considered as cartilaginous metaplasia of lipoma. Most of the time etiology is unknown. But proposed hypothesis is differentiation of pluripotent mesenchymal cells into both adipose and cartilage tissue. The trigger for differentiation is either local trauma or ischemia. It can present in breast, extremities, tongue and other sites [3]. Both male and female are affected, but females are affected more compared to male sex.

Most of the time it is misdiagnosed due to its similarity with fibroadenoma[4]. Clinical features varies from palpable lump to giant breast mass. Sometimes it can mimic like sarcoma or carcinoma. Preoperative diagnosis will be difficult due to its presentation

It can be misdiagnosed as carcinoma due to its calcification on mammogram[5-6]. Sometimes trucut biopsy can give preoperative diagnosis.

Histopathological features of chondrolipoma are well capsulated tumour mass consisting of mature adipose tissue with hyaline cartilage[7]. It contain both chondroid and adipose tissue[8]. Calcifications rarely occur in chondrolipoma. Our case was one of the case which reported with calcifications.

There are few differences with chondroid liopma and chondrolipoma. Chondrolipoma contain true hyaline cartilage, whereas chondroid liopma doesn't contain true hyaline cartilage.

Eventhough chondrolipoma has diagnostic difficulty like our case, the treatment modality is simple. Most of the time simple excision is treatment of choice in most of the cases. But excision should include capsule of chondrolipoma. Most of the cases no recurrences occur after proper excision with capsule.

Conclusion

Chondrolipoma of breast is a rare entity. Most of the time it will be misdiagnosed either fibroadenoma or carcinoma breast because it contain both features of fibroadenoma like mobile, firm mass as well as features of carcinoma like hard mass with calcification on mammogram. Most of the time because of the microcalcification it will be misdiagnosed as carcinoma. Pre operative diagnosis will be difficult because it will show fat cells. So image guided core needle biopsy or excision biopsy needed for proper diagnosis. Diagnosis can be confirmed with histopathological examination. So consider chondrolipoma one of the differential diagnosis for microcalcifications.

Fig.No. 1 Showing pleomorphic microcalcifications with BIRADS IV

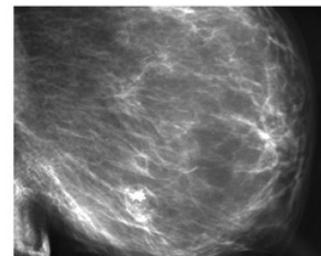


Fig.No. 2 showing cut surface of lump yellowish fatty tissue with multiple small calcifications with capsule

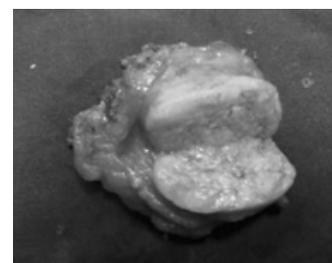
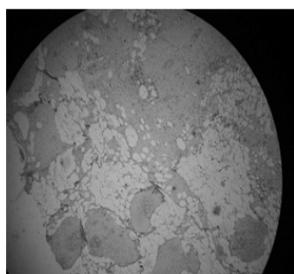


Fig.No. 3 showing mature adipose tissue with hyaline cartilage. Fibrocartilage seen. Few areas showed calcification



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