

Case Study

Diagnostic difficulty of breast lump- revealed a rare entity

Abstract

Lipoma is a benign soft tissue tumor of adipose tissue. Most of the time lipoma was diagnosed based on clinical features. Histopathological diagnosis needed in certain cases. There are many subtypes of lipomas. One of the rare variant of lipoma was chondrolipoma. Chondrolipoma was 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 tumor, hyaline cartilage, excision and biopsy

Case Report

58 years old female patient admitted with complaints of lump in the right breast for 11 month 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. Mass was not attached to underlying surface or pectoral muscle. Nipple areolar complex found to be free. Contra lateral breast and both axilla found to be free. clinically patient was diagnosed as carcinoma breast.

Sonomammogram showed lump of 4x3cm present in right lower and outer quadrant with pleomorphic micro calcifications with BIRADS IV (Fig.1), suggested histopathological examination. A fine needle aspiration shows 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.2). Histopathological examination showed mature adipose tissue with hyaline cartilage. Fibrocartilage seen. Few areas showed calcification (fig.3).

Discussion

Lipoma presents with variety of presentation. It can present as adenolipoma, angiolioma, chondroid lipoma, hibernomas, neurolipoma, fibrolipoma, pleomorphic lipoma. Chondrolipoma is a benign mesenchymal tumor of adipose tissue, which composed of adipose tissue and true mesenchymal hyaline cartilage.^[1] Chondrolipoma is considered as cartilaginous metaplasia of lipoma. Most of the time etiology was unknown. But proposed hypothesis was differentiation of pluripotent mesenchymal cells into both adipose and cartilage tissue. The trigger for dedifferentiation was either local trauma or ischemia. It can present in breast, extremities, tongue and other sites.^[2] Both male and female are affected, but females are affected more compared to male sex. Chondrolipoma breast most of the time was misdiagnosed due to its similarity with fibroadenoma.^[3] Clinical features vary 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.^{[4] [5]} Sometimes trucut biopsy can give preoperative diagnosis. Histopathological features of chondrolipoma are well capsulated tumor mass consisting of mature adipose tissue with hyaline cartilage.^[6] It contain both chondroid and adipose tissue.

51 ^[7] Calcifications rarely occur in chondrolipoma. Our case was one of the case which reported
52 with calcifications.

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

55 Even though chondrolipoma has diagnostic difficulty like our case, the treatment modality
56 was simple. Most of the time simple excision was treatment of choice in most of the cases.

57 But excision should include capsule of chondrolipoma. Most of the cases no recurrences
58 occur after proper excision with capsule.

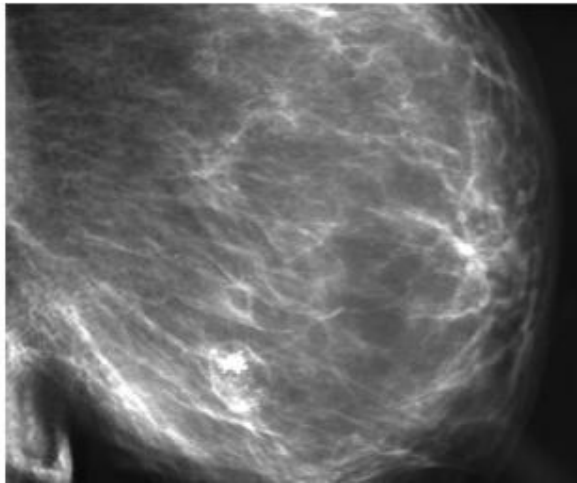
59 **Conclusion**

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

68 **References**

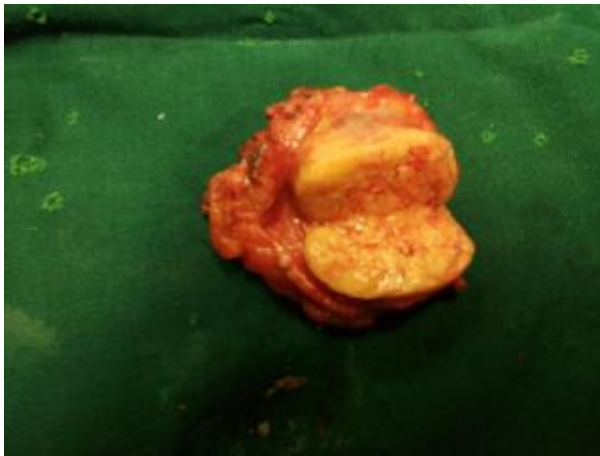
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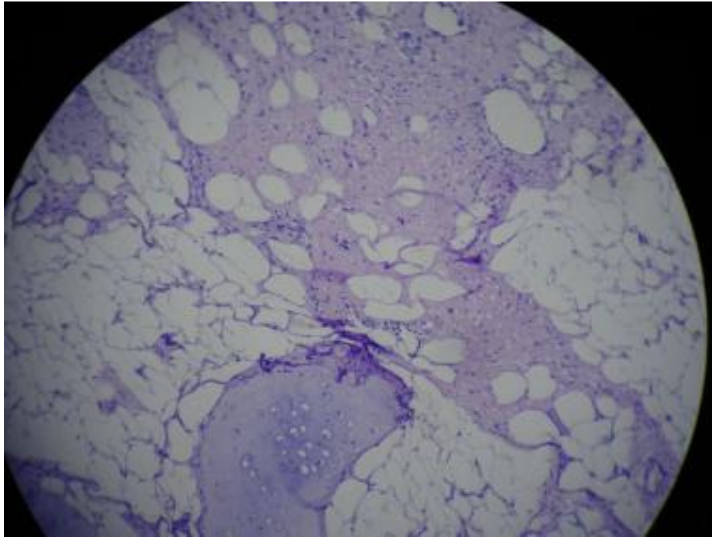
84

85 **Figure 1**



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87 **Figure 2**



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89 **Figure 3**