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Case Report:

Hamartoma Breast, Chondromatous Type.

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Abstract: This case report describes an exceedingly rare case of hamartoma of breast with predominantly chondroid stroma. A 45 year old lady presented with a mobile lump in the upper outer quadrant of left breast, clinically diagnosed as fibroadenoma. Mammography and FNAC were not done. She underwent lumpectomy and we received the specimen measuring 7x5x3cm. Cut surface of which revealed grey white nodule with glistening surface. Histopathologically we found a circumscribed lesion with predominantly mature hyaline cartilage separated by fibrocollagenous bands.

Kev Words: Cartilage: Hamartoma

Introduction:

Cartilage is not uncommonly found in malignant mesenchymal and epithelial neoplasms of human breast. However, the occurrence of cartilage in benign human mammary tumors is extremely rare. We report a benign breast tumor with islands of hyaline cartilage in a 45 years old woman.

Case Report:

A 45 years old female presented with a mobile lump in the upper outer quadrant of left breast, clinically diagnosed as fibroadenoma. The patient underwent lumpectomy. Fine needle aspiration and mammography were not performed.

Gross: We received a lumpectomy specimen measuring 7 x 5 x 3 cm. Cut section showed a well defined grev white nodule measuring 4 x 2.8 cm, surrounded by fibrofatty tissue. The surface depicted faintly glistening appearance.

Microscopy: The breast tissue displayed a circumscribed lesion, containing lobules of cartilaginous tissue separated by fibrocollagenous bands. The lobules of cartilage contained closely arranged chondrocytes in lacunae, lacking in any significant degree of atypia. The central portions of the lesion exhibited ischemic necrosis. No mitoses were evident. At places, within the islands of cartilage, cellular proliferation was seen, composed of smaller possibly immature chondrocytes. Calcification was also noted. No atypia of chondrocytes noted. No invasive growth pattern. Adipose tissue lobules were seen at the periphery with lymphocytic infiltration. There was no evidence of carcinomatous component. The surrounding breast tissue was within normal limits. The lesion was diagnosed as 'Hamartoma breast - chondromatous type'.

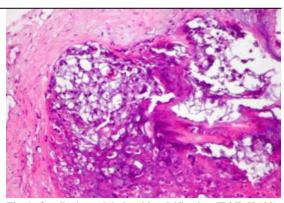


Fig. 1: Cartilaginous lobule with calcification (H&E, X 100)

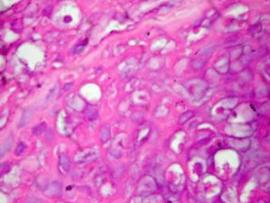


Fig. 2: Closely arranged chondrocytes in lacunae (H&E, X 400) Discussion:

Cartilage is rarely seen in benign conditions of human breast. Most often, cartilaginous components are associated with a primary malignancy of the breast. Cartilage is also encountered in the breast as a component of benign chondrolipomatous tumor.^{1,2} The possible origins of cartilage in such tumors were discussed by Lugo et al in 1982.3 They concluded that chondroplipomatous tumor cannot be a part of hamartoma since it is not a normal component of human breast and neither can be called a choristoma because of presence of normal components like fat and breast ducts. They put forth the possibility of dystrophic chondrification following traumatic fat necrosis. An alternate explanation considered was metaplasia of the proliferating fibrous stroma in fibrocystic breast disease. Smith and Taylor in 1969 reviewed 35 patients with mammary lesions that contained either metaplastic bone and/or cartilage none were chondrolipomatous.⁴ Nobuyuki Uchida et al in 2004 presented a case of breast tumor with predominantly chondromatous areas and lacking any fat and muscular tissue.5 This case was similar to our case where we found predominantly hyaline cartilage surrounded fibrocollagenous tissue, and no mammary ducts and adipose tissue was seen within the tumor mass.

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