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Case Report

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CHONDROID SYRINGOMA OF BREAST: A CASE REPORT WITH LITERATURE REVIEW

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ABSTRACT

Chondroid Syringoma [CS] is a benign tumour of the skin arising from the sweat glands with epithelial and mesenchymal tissues mimicking Pleomorphic Adenoma of parotid gland. It is a rare tumor occurring in skin and its occurrence in breast is further rare where its presence mimicks malignancy and proper diagnosis is mandatory which requires an excisional biopsy. Presenting a case of Chondroid Syringoma of right breast in a sixty- Eight year old female which mimicked breast carcinoma.

KEYWORDS: Pleomorphic adenoma of breast,mixed tumour of skin , Breast cancer.

INTRODUCTION

Chondroid Syringoma is a rare skin adnexal tumour which represents the cutaneous counterpart of pleomorphic adenoma of salivary glands and can have either a benign or a malignant behaviour. These are non ulcerating, nodular tumors with a characteristic myxoid and cartilaginous matrix.[1–3] They tend to occur predominantly on face, head, neck, trunk & extremities [2-3]But its occurrence in skin of breast is rare & it is questionable to call it breast syringoma. Presentation as a lump in breast brings it in line with other benign & malignant pathology of breast & hence need for Presenting this pathology and reviewing literature.

CASE PRESENTATION

A 68 year old female presented with an asymptomatic lump accidentally detected 15 days back in right breast. Patient a non diabetic and non hypertensive had No family history of breast cancer.

Physical examination showed a single lump of size 4 cm x 3 cm palpable in the retro-areolar region of the right breast with no retraction of nipple or discharge. No Axillary lymphadenopathy was observed. Other breast was normal.

A fine needle aspiration cytology [FNAC] showed monolayered cohesive sheets of ductal cells with foci of calcification. Trucut biopsy was done which again showed monolayered cohesive sheets of ductal cells with foci of calcification & occasional osteoclastic giant cells with haemorrhagic background diagnosed as proliferative breast disease without atypia. Due to lack of diagnostic confirmation, lumpectomy was done and specimen sent for histopathology as frozen section facility was not available. Gross examination showed a single irregular, yellowish brown firm to hard tissue of size 5 x 4 x 3 cms which gave a gritty sensation on cutting. Histopathology revealed a well circumscribed epithelial elements embedded within a myxoid, chondroid and fibrous stroma. The epithelial elements showed branching tubules, solid cords and many non branching tubules lined by cuboidal cells with round to oval nuclei with or without prominent nucleoli. Few tubules were lined by cells with eosinophilic cytoplasm and secretions in the lumen. At places, clear cell change was also seen. There was large amount of intervening myxoid connective tissue. At places osseous tissue with bone marrow elements was also seen. The adjacent tissue showed adipose tissue and congested blood vessels. All these features were suggestive of CS of right breast.(Figure 1-2)

Immunohistochemistry [IHC] staining showed positivity for S100 which confirmed the diagnosis of CS.

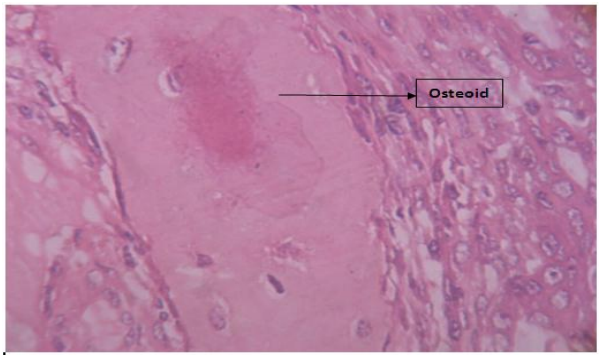

Figure 1

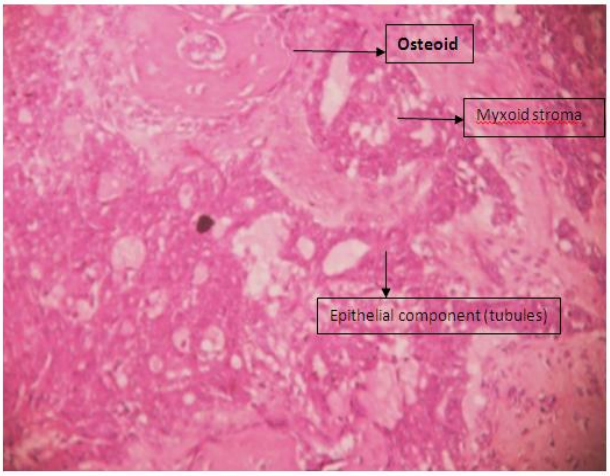

Figure 2

DISCUSSION

Billroth in 1859 originally defined ‘‘The Mixed Tumor’’ of the skin as an entity having the same histopathologic properties of the mixed tumors of the salivary glands.[4] The term ‘Chondroid Syringoma’ was first used by Hirsch and Helwig in 1961 to describe this sweat gland tumor, because of the presence of sweat gland elements which are set in a cartilaginous stroma.[5] The reported incidence of CS ranges between 0.01- 0.098% of all primary skin tumors[6]. CS clinically presents as a slow-growing, painless, subcutaneous or intracutaneous nodule which affects middle-aged or older men[6,7] and located most commonly on the nose, cheeks and lips.[8] Less commonly, this tumor can develop in the axillary region, penis, vulva, and scalp. We report a rare case of a chondroid syringoma with an atypical location in the breast. The first case of CS in the breast was reported in 1906 by Lec’ene.[9] From then only 74 cases of CS of breast have been reported in the world literature.[10-13]

It is uncommon in breast and its clinical and pathological characteristics include occurrence in age group of 23-85 years mainly occurring in the juxta-areolar region or sub-areolar region, as was observed in present case,suggesting that it originates from the large duct.[3,14–18] The location may be entirely in the subcutaneous tissue or rarely the dermis. The histological characteristics include a chondroid or basophilic stroma with a tumor that seems benign is highly suggestive of chondroid syringoma. The tumor may be composed of large multilayered or elongated tubules of varying sizes and shapes. Smith and Taylor in 1969 reported 9 such similar cases in the breast[19] and reported that this kind of tumor is an intraductal papilloma with areas of osseous and chondroid stroma rather than a separate kind of neoplasm. However, other authors believe that this kind of tumor is a separate entity as the presence of chondroid and osseous stroma is not seen in intraductal papillomas. In present case, the presence of both myxoid and osteoid stroma on paraffin sections is diagnostic of CS of breast. Minimum size of CS of the breast reported is 0.6cm and the maximum size 17cm, was of a patient that had this tumor for 30 years; but the majority of the tumors are reported to be 2 cm in size,as was observed in present case.[10]

Benign or malignant phyllodes tumour, colloid carcinoma and fibroadenoma can be listed in differential diagnosis. This kind of tumor can be distinguished more easily by paraffin sections, but when a frozen section is the sole technique of diagnosing, it may be misdiagnosed. This may be because of the lack of epithelial cells in every section that can be taken. It must be considered as a differential diagnosis in a lesion with chondroid or osseous material. In our study, the diagnosis was made upon a paraffin section and further confirmed on IHC.

Immunohistochemical studies on chondroid syringomas have shown that the tumors stain positive for S100 protein and muscle-specific actin (myoepithelial cells) and cytokeratins. Electron microscopic studies have shown intermediate filaments with dense bodies and intercellular junctions. A myoepithelial cell role has been proposed in the histogenesis of this tumor.[18]

Therapeutic procedures when reviewing the literature were mostly excision,[10] as was done in present case & local recurrence was reported in two cases and no metastasis reported so far, thereby proving excision with clear margins as preferred treatment of choice in such cases.

CONCLUSION

To conclude, this is the seventy-fifth documented case of a Chondroid Syringoma occurring in the breast. CS is a rare benign tumor of the breast, presenting as breast mass predominantly in juxtaareolar region and may be confused with a number of benign and malignant tumors on FNA. Thus, an awareness of CS will help in accurate diagnosis through careful examination of paraffin sections eliminating the need of unnecessary aggressive surgery. Complete excision with an adequate margin of clearance is highly recommended for prevention of recurrence or malignant transformation.

INFORMED CONSENT

Informed consent was not obtained as this is a case report without recognizable photographs of patient.

CONFLICT OF INTEREST

No conflict of interest was declared by the authors.

FINANCIAL DISCLOSURE

The authors declare that this case has received no financial support

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