

Epidermoid Cyst of Breast -A Case Report



Medical Science

KEYWORDS : Epidermoid cyst ,
Malignant potential, Mammography

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ABSTRACT

Epidermoid cysts are common benign disorders of the skin, which occur frequently in the scalp and in the skin of the neck and back. When they develop in the breast parenchyma they are an uncommon benign condition, yet have the potential for malignancy. The diagnosis of this condition may not be straightforward with imaging alone. An epidermoid cyst presenting as an enlarging lump in the breast may mimic a benign breast lesion such as fibroadenoma or malignant lesion with benign imaging features. Excision is recommended for definite histopathological diagnosis and to prevent potential risk of malignant transformation.

Case Report :

We highlight a case of 57 yr old elderly female, presenting with a large, freely mobile, non-tender lump in left breast since 40 years. The lump increased in size over a short period of time. Bluish discoloration of the skin over the lump seen. No history of any nipple discharge. Locally a freely, mobile non tender palpable lump, measuring around -7x6x3 cm was seen present over inner lower quadrant of left breast (figure 1). Mammography revealed a large well defined mass in the left infero-medial quadrant with smooth margins with a few necrotic areas within the mass BI RADS CATEGORY IV- suspicious of malignancy. Ultrasound revealed a large hypo echoic mass measuring 9x 5.2 x 8.2 cms is seen in the infero- medial quadrant with few tiny hyperechoic areas. A malignant tumor was suspected based on the imaging and clinical features. In view of the recent increase in size, early malignant transformation needed to be ruled out. She underwent tumor excision after frozen section was done, and an epidermoid cyst was confirmed by histopathological assessment. Post operatively, a well circumscribed whitish, soft cystic mass M-10x 7x 2.5cm with swollen margin and congested blood vessels were observed. Lumen contained thick/chalky & waxy material (figure 2, 3). Gross section revealed collapsed, cut open cyst containing pultaceous materials. (figure 4). The histology revealed stratified squamous epithelial lining and laminated keratin (figure 5, 6, 7, 8)

DISCUSSION

Breast epidermoid cysts are rare. Epidermal cysts in breast can develop due to an obstructed hair follicle, following trauma in form of needle biopsy which causes fragments of epidermis to become implanted deep in breast tissue or due to squamous metaplasia of normal columnar cells within an ectatic duct in areas of fibroadenosis or adenoma.

On mammography, epidermal inclusion cyst appears as a well circumscribed, homogenous mass. On ultrasonography it is solid and complex appearing and on clinical examination consistent with benign lump. Although epidermal inclusion cysts are benign occasionally they may play a role in the origin of squamous carcinoma of the breast (.045%) They can develop as a result of proliferation of epidermal cells within a circumscribed space of the dermis. Genetic anomaly is also a cause - arises from small nests of cells from an embryonic phase of development.

On diagnostic imaging, it may mimic a malignancy. On Mammography, it shows a well circumscribed, homogenous dense mass. On ultrasonography, it gives an onion-ring appearance with al-

ternating concentric hyperechoic and hypoechoic rings. On CT scan/ MRI, isotense lobulated mass is seen. Excisional biopsy is a must for definitive diagnosis. Differential diagnosis for this are Fibroadenoma, Dermoid cyst, Lipoma, Haemorrhagic cyst, Pilar cyst, Sebaceous cyst and Phylloid breast tumor.

Complications are as follows, Spontaneous rupture, Inflammation, Infection/ Abscess, Paget's disease

CONCLUSION

- ▶ Epidermoid cysts are rare in breast parenchyma.
- ▶ They may be confused with malignant tumors on mammography.
- ▶ An ultrasound examination helps them to distinguish them from the breast parenchymal tumors.



Figure 1.



Figure 2.



Figure 3.

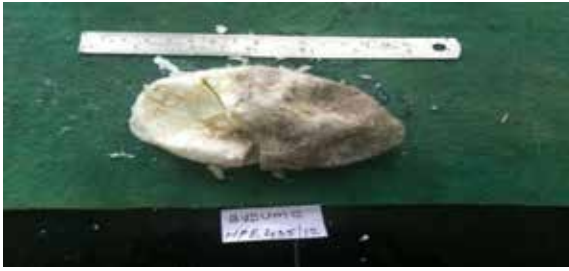


Figure 4.

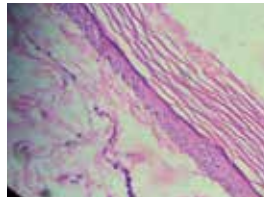


Figure 7.

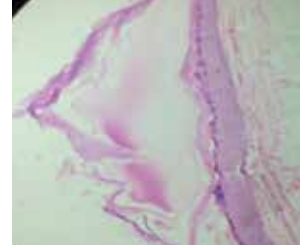


Figure 8.

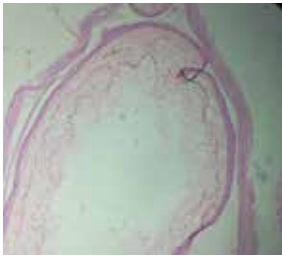


Figure 5.

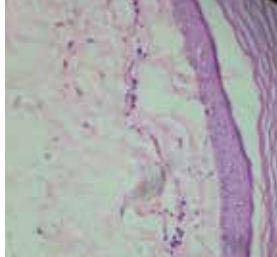


Figure 6.

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