
CASE REPORT

40 Years Old Mass, Resting in Male Breast; A Rare Epidermal Inclusion Cyst

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ABSTRACT

We present a case of 50-years-old male, with right breast epidermoid cyst, whose enlargement over the past few months caught the attention, due to its harmless nature its enlargement since 40 years was ignored by patient. Its occurrence in the breast tissue is rare as documented in literature. However, clinicians might find difficulty in differentiating it from other breast swellings like gynecomastia, fibroadenoma, or benign and malignant conditions of breast. The purpose of this case report is to increase the awareness among the general surgeons of this rare presentation; and to entertain the phenomenon of diagnosing with simple radiological modalities. Complete excision using elliptical incision is still the surgical treatment of choice.

Key words: epidermal inclusion cyst, elliptical incision, gynecomastia, fibroadenoma.

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INTRODUCTION

Presentation as a breast lump in males, as an Epidermal Inclusion Cyst, is a rare clinical entity. Its a benign condition which promises to have least malignant potential. Skin is its birth site embryologically. These cysts which are also termed as Keratinous cyst, usually misdiagnosed as a breast lump or mass. In literatures around 40 cases presenting as an epidermal inclusion cyst in breast have been proved¹ proving it a rare entity.^{2,3} The incidence of these cysts being malignant is up to 19% with high index of suspicion. The most common reason for its development in human body is the blockage of hair follicles⁵

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CASE REPORT

A 50 years old male, diagnosed case of Diabetes Mellitus and Hypertension, presented in surgical outpatient clinics at our institute. 40 years have been spent by the patient, living with this swelling in his right breast. It was intentionally ignored as a symptomless lump except for the feeling of a mass until and unless, it started increasing in size. For few months, a small punctum formed discharging some thick cheesy material, which gained the patient's attention. On examination, a soft swelling, around 10 x 9 cm in its dimension, felt / observed mobile over the chest wall. No axillary lymph nodes was palpable. Ultrasound guided biopsy declared as an epidermal inclusion cyst.

During his admission, preoperative assessment was completed by an expert medical and anesthetic consultant. After the prerequisites for the fitness and surgery was done, he was put on list for the excisional biopsy. A detailed informed and written consent was taken, and the ethical approval was sought.

Under general anesthesia, elliptical incision was given, and en-mass removal was done. Hemostasis secured and Redivac drain was

placed in the cavity. Skin was closed with prolene and dressing done. Flaps found healthy postoperatively, while redivac drain was removed on the third postoperative day, and patient was discharged. On follow up visit, there was good healing of the wound. Sutures were removed after 10 days.

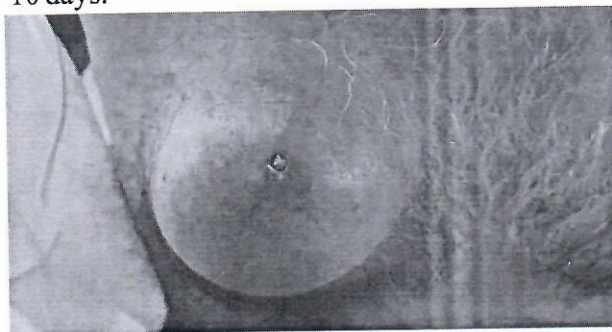


Figure 1: Mass with punctum, Right male breast.



Figure 2: Lateral view of the right breast mass.

DISCUSSION

Skin epithelium is the fertile ground for the cystic swellings to develop. Head, neck, trunk and extremities are the well renowned regions for its occurrence, However the case of largest epidermoid cyst have been recorded on gluteal region measuring $17.8 \times 13.8 \times 5.8$ cm in its dimensions.⁶ Recent reports declared very few cases to be present in the literature with one of the epidermoid cyst in the breast documented having the size of 3.1×2.3 cm.⁷ Acquired possibilities include trauma, or interventions like mammoplasty which can proceed to its development. However, it can also be of congenital origin. Squamous metaplasia or even the inflammatory changes in the epidermis are blamed for the development of epidermal

inclusion cyst⁸. It usually appears in third and fourth decade of life as a soft to firm, nontender and non-compressible swelling which have well defined circumscribed picture on sonography⁹. Material from the aspiration of epidermal cyst might reveal flakes and cheese like amalgam. Complications which might develop are rupture due to inflammation, bacterial invasion, bleeding or potential to become malignant. Complete surgical removal is the treatment modality till date, since it holds the potential to recur.

Poor understanding of the pathogenesis of cyst at the tissue level lead to different theories including trauma, progressive ectasia of infundibulum of hair follicles¹⁰, or congenital developments in the line of embryological closure¹¹. The possible development of the cyst in our case, seems to arise either from the blockage of hair follicles or probably congenital inclusions along the embryological developments. As the history was long, and there was no previous lump or any history of trauma was evaluated.

As the breast tissue has fatty and glandular parenchyma, the epidermoid cyst in breast usually develops as a soft swelling, However it can be nodular in other areas of origin. Ultrasound usually gives the picture of well defined, solid and echogenic lesion¹². On doppler there is usually no flow or vascularity, however the possibility of neoplastic etiology cannot be definitely excluded on clinical as well as radiological grounds. Trucut biopsy analysis usually shows fragments of squamous epithelium with either agranular or granular layer with keratin flakes in the lumen.

Epidermoid cysts with huge size are not often seen in surgical clinics¹³. The size of epidermoid cyst in the breast, as reported in a case series found to be $0.5-1.5$ cm¹⁴. In our report, the dimensions of the epidermoid cyst in the right male breast was 10×9 cms.

Bacterial invasion and rarely malignancy can complicate the simple epidermoid cyst. Infection can cause tenderness and might lead the cyst to burst.

The choice of surgery for epidermoid cyst is complete excision, enucleating along with its capsule, usually followed by an elliptical incision around its punctum. Rest for sure, a total excision is mandatory for a definitive histopathological analysis and also to rule out any behaviour from benign to malignant.

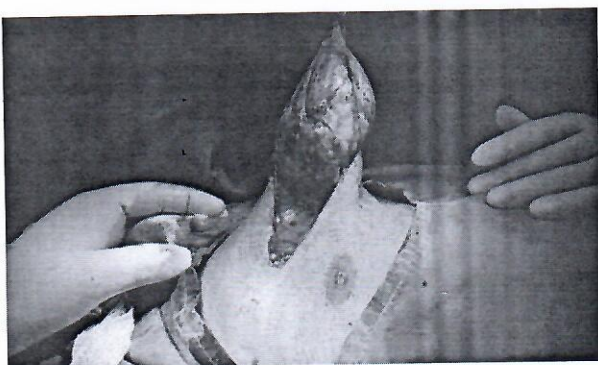
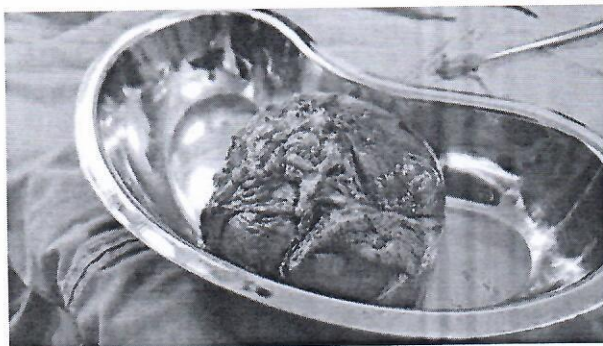


Figure 4: 10 x 9 cms mass, completely excised from right male breast.



CONCLUSION

Epidermoid inclusion cyst in male breast is a rare presentation and challenge for clinical and radiological diagnosis. Proper management with appropriate surgical intervention is the pearl to get rid of this morbidity and prevention for being mismanaged.

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