

# An epidermal cyst mimicking a breast tumor in a male patient: A case report

Mehmet Eren Yuksel<sup>1</sup>, Funda Tamer<sup>2</sup>

<sup>1</sup>Department of General Surgery, Devrek State Hospital, Zonguldak, Turkey, <sup>2</sup>Department of Dermatology, Turgut Ozal University School of Medicine, Ankara, Turkey

**Corresponding author:** Dr. Funda Tamer, E-mail: fundatmr@yahoo.com

Dear Editor,

A 61-year-old Caucasian male presented with a breast lump for further clinical evaluation. The patient admitted that the slowly growing mass had been present for a year. The lesion was asymptomatic, however the patient was concerned about the risk of malignancy. The past medical history and family history were both unremarkable. The physical examination of the patient revealed a skin coloured, well-defined, firm, subcutaneous nodule with a punctum and telangiectasias on the surface (Fig. 1). The lesion was located on the trunk, laterally to the right areola measuring 3x2.5 cm. There was no axillary lymphadenopathy. The lesion was surgically removed without any complications (Fig. 2). The histopathological examination of the specimen revealed an epidermal cyst.

An epidermal cyst is a benign lesion which consists of lamellated keratin. The etiology of an epidermal cyst remains unknown. However, it can be congenital or it can occur due to obstruction of hair follicles and trauma as a result of implantation of epidermis into the dermis. An epidermal cyst usually presents as a small, subcutaneous papule or nodule on the head, neck, trunk and extremities [1]. An epidermal cyst is rare in the breast, however it should be considered in differential diagnosis of benign and malignant breast tumors. A few cases of epidermal cyst in the breast have been reported previously. Taira et al. reported a 85-year-old woman with an epidermal cyst measuring 3x2 cm in the right breast and a 45-year-old woman with an epidermal cyst measuring 9x8 cm in the left breast [2]. Lee et al. reported a 47-year-old female with



**Figure 1:** A skin coloured, well-defined, firm, subcutaneous nodule with a punctum and telangiectasias on the surface.



**Figure 2:** Intraoperative view of the cyst, keratin content is draining through the elliptical incision.

an epidermal cyst measuring 7x6 cm which mimicked a large fibroadenoma or phyllodes tumor [1]. Martin et al. reported a 42-year-old female with an epidermal

**How to cite this article:** Yuksel ME, Tamer F. An epidermal cyst mimicking a breast tumor in a male patient: A case report. Our Dermatol Online. 2016;7(4):492-493.

**Submission:** 07.04.2016; **Acceptance:** 13.06.2016

**DOI:**10.7241/ourd.20164.136

cyst of 3.8 cm in size in the subareolar area of the right breast mimicking malignancy [3]. Gupta et al. reported a 32-year-old male with an epidermal cyst of 10x10 cm in size which slowly grew in 5 years [4].

Presentation of an epidermal cyst as a breast lump in a male patient is an unusual condition [4]. To the best of our knowledge, only 8 male patients with epidermal cysts of the breast have been reported in the English literature [5]. Epidermal cyst of the breast in a male patient should be differentiated from benign and malignant lesions such as gynecomastia, lipoma, intraductal papilloma, subareolar abscess, hematoma, fibroadenoma, invasive ductal carcinoma, papillary carcinoma and primary lymphoma of the breast. Furthermore, an epidermal cyst can undergo malignant transformation in the form of squamous cell carcinoma, basal cell carcinoma, mycosis fungoides, and melanoma [4]. Moreover, Paliotta et al. suggested that malignant transformation might occur more frequently in epidermal cysts of the breast compared to epidermal cysts occurring in the other parts of the body [5]. Hence, histopathological examination is

mandatory to reach a definitive diagnosis and to exclude malignancy. Therefore, surgical removal of an epidermal cyst is highly recommended [4].

## REFERENCES

1. Lee YA, Park SG. Giant sized epidermal inclusion cyst of the breast initially mimicking a large fibroadenoma or phyllodes tumor. *J Korean Surg Soc.* 2012;83:107-10.
2. Taira N, Aogi K, Ohsumi S, Takashima S, Kawamura S, Nishimura R. Epidermal inclusion cyst of the breast. *Breast Cancer.* 2007;14:434-7.
3. Martin C, Bombard T, Coker M, Payne E, Yoxtheimer ML, Elsamaloty H. Rare case of benign epidermal inclusion cyst mimicking malignancy. *Appl Radiol.* 2016;45:34-6.
4. Gupta R, Paul R, Sharma SB. Giant epidermoid cyst presenting as breast lump in male. *Sch J App Med Sci.* 2014;2:1869-73.
5. Paliotta A, Sapienza P, D'Ermo G, Cerone G, Pedullà G, Crocetti D, et al. Epidermal inclusion cyst of the breast: A literature review. *Oncol Lett.* 2016;11:657-60.

Copyright by Mehmet Eren Yuksel, et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.  
**Source of Support:** Nil, **Conflict of Interest:** None declared.