



# Gynecomastia-Like Hyperplasia of Female Breast

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## Abstract

**Introduction:** Gynecomastia is defined as abnormal enlargement in the male breast; however, histo-pathologic abnormalities may theoretically occur in female breasts.

**Case:** A 37 years old woman para 2 presented with a right painless breast lump. Bilateral mammographic study revealed right upper quadrant breast mass BIRADS 4b. Wide local excision of the mass pathology revealed fibrocystic disease with focal gynecomastoid hyperplasia.

**Conclusion:** Gynecomastia-like hyperplasia of female breast is a rare entity that resembles malignant lesions clinically and radiological and is only distinguished by careful pathological examination.

**Keywords:** Breast mass; Surgery; Female gynecomastia

## Introduction

Gynecomastia is defined as abnormal enlargement in the male breast; however, the histo-pathologic abnormalities may theoretically occur in female breasts [1]. Rosen [2] was the first to describe the term “gynecomastia-like hyperplasia” as an extremely rare proliferative lesion of the female breast which cannot be distinguished from florid gynecomastia.

The aim of the current case is to report one of the rare breast lesions, which is gynecomastia-like hyperplasia in female breast.

## Case Presentation

A 37 years old woman para 2 presented with a right painless breast lump, which was accidentally discovered 3 months ago and of stationary course. There was no history of trauma, constitutional symptoms or nipple discharge. She is non-smoker, has regular menses and uses intrauterine contraceptive device as a method of contraception. Both past and family history is irrelevant. On examination there was a single right upper outer quadrant ill-defined, firm mass measuring about 4 cm × 4 cm with no signs of inflammation, no nipple discharge and no palpable axillary lymph nodes. The other breast was normal.

Bilateral mammographic study revealed right upper quadrant breast mass BIRADS 4b. True cut needle biopsy revealed fibrocystic disease. In view of the above the decision was taken to remove the mass and the patient was consented for that. Pre-operative work-up was unremarkable.

Wide local excision of the mass was done (Figure 1) and sent for frozen section which confirmed the results of the needle biopsy. Histo-pathology revealed fibrocystic disease with focal gynecomastoid hyperplasia margin (Figure 2) and a safety margin of 0.4 cm in the least. The institutional review board of the hospital approved publication of this case.

## Discussion

The incidence of female gynecomastia-like changes is about 0.15% (4/2709) of all female breast lesions in a study done by [3], with an average reported age of 32 years. Umlas [1] was the first to report cases of gynecomastia-like hyperplasia presenting as masses ranging between 1 cm and 3 cm. in size highlighting the rarity of such condition as it was only found in 4 cases out of 1,242 pathological breast specimens examined over a period of 26 months, with no recurrence detected in any of those cases after 27 months of follow-up [1].

The current case presented as a palpable breast mass, which may be the clinical presentation in some cases, while other cases may be detected by mammography [1]; however, the lesion may

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**Received Date:** 07 May 2018

**Accepted Date:** 18 May 2018

**Published Date:** 25 May 2018

### Citation:

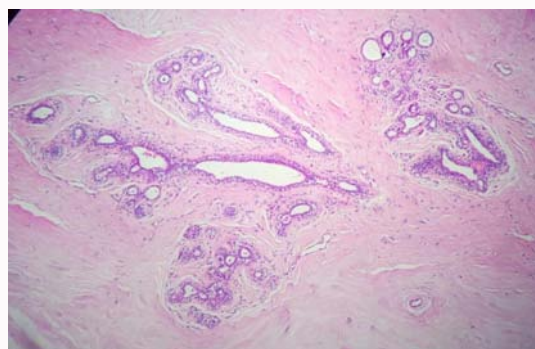
Torky HA, El-Shenawy AA, Eesa AN. Gynecomastia-Like Hyperplasia of Female Breast. *Ann Infert Rep Endocrin.* 2018; 1(2): 1009.

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**Figure 1:** The excised breast mass.



**Figure 2:** Microscopic picture of gynecomastia-like hyperplasia.

also arise along any breast tissue along the nipple-line as the case reported by who reported a 1.5 subcutaneous mass lying between the superior part of the axilla and the medial arm discovered after histopathological examination of the excised mass [4].

The exact cause of such lesion is unknown, but hormonal imbalance between estrogens and androgens is postulated as a possible cause. Microscopic examination of gynecomastia-like changes is characterized by absence of lobules, ductal epithelial hyperplasia, periductal edema and concentric fibrosis similar to that of male patients with the same condition. Hamartomas and juvenile hypertrophy are possible histologic differential diagnosis. Microscopic recognition of this benign lesion is of extreme importance as clinical and radiological findings alone cannot differentiate it from malignancy [5].

The rarities of the condition lead to the suggestion of criteria for diagnosis which are “1) Displays features typical of gynecomastia of the male breast: Poorly circumscribed, ductal hyperplasia with micropapillae (thin tips, wider at base and smaller, hyperchromatic cells at tip but not at base) periductal stromal edema or fibrosis may be present, and no lobules. 2) Reported sizes range from two high power fields to 5 cm. 3) Gynecomastia-like change has been suggested to fall within the spectrum of fibrocystic disease. 4) It is frequently associated with fibrocystic disease. 5) It has been variously designated as gynecomastia-like lesions, areas, changes and hyperplasia. 6) Some such distinctions are based on the presence of a mass, size and association with other processes” [6].

## Conclusion

Gynecomastia-like hyperplasia of female breast is a rare entity that resembles malignant lesions clinically and radiological and is only distinguished by careful pathological examination; therefore, thorough pathological examination is essential for diagnosis in order to avoid unnecessary subsequent interventions.

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