



CHRONIC MASTITIS WITH ATYPICAL HYPERPLASIA AND FIBROCYSTIC CHANGES IN A MALE BREAST: A RARE CASE REPORT

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ABSTRACT **Background:** Inflammatory and proliferative breast lesions are rare in males and can mimic malignancy both clinically and radiologically. Atypical hyperplasia in male breast tissue is particularly uncommon but significant due to its premalignant potential. **Case Presentation:** A 51-year-old male presented with pain, swelling, and discharge from the right nipple-areolar complex. Imaging studies suggested an evolving abscess with suspicious features (BI-RADS 4A). Despite antibiotic therapy, symptoms persisted. FNAC suggested an abscess, and trucut biopsy indicated chronic granulomatous mastitis. Surgical excision was performed. Final histopathology revealed fibrocystic disease with epithelial hyperplasia, focal chronic mastitis, and occasional atypical hyperplasia. **Conclusion:** This case highlights the complexity of diagnosing male breast lesions and the potential for overlapping inflammatory and pre-malignant conditions. A thorough histopathological evaluation is essential to rule out malignancy and guide appropriate management.

KEYWORDS :

INTRODUCTION

Breast pathology in males is relatively uncommon and often limited to benign conditions such as gynecomastia. Inflammatory breast diseases like chronic mastitis, especially chronic granulomatous mastitis (CGM), are extremely rare in men due to the lack of well-developed lobular structures typically seen in female breasts. Even more unusual is the presence of fibrocystic changes and atypical epithelial hyperplasia in the male breast, both of which are considered premalignant or hormonally influenced changes commonly seen in females.

The clinical presentation of such lesions in males can closely mimic that of breast carcinoma, leading to diagnostic uncertainty. Imaging modalities such as ultrasound and MRI may show suspicious features, often prompting biopsy to rule out malignancy. Histopathological examination remains the cornerstone of accurate diagnosis.

We report a rare case of a 51-year-old male with a painful, discharging breast lump, initially suspected to be malignant based on imaging, but later diagnosed as a combination of chronic mastitis, fibrocystic disease, and focal atypical hyperplasia following surgical excision. This case underscores the importance of considering a broad differential diagnosis in male breast lesions and highlights the role of histology in guiding management.

Case Report

A 51-year-old male presented with a 5-day history of right breast pain and a 4-day history of swelling and purulent discharge from the nipple-areolar complex (NAC). He had no prior breast disease, trauma, or systemic symptoms. On examination, a 2×2 cm indurated, tender lump was noted over the right NAC, with local warmth and discharge. No axillary lymphadenopathy was present.

Ultrasonography of the breast revealed an ill-defined, heterogeneous hyperechoic lesion measuring 1.2 × 1.8 × 2.3 cm over the NAC, with inflammatory changes, and was categorized as BI-RADS 4A. Pus culture revealed normal skin flora.

The patient was initially treated with oral antibiotics for presumed mastitis with abscess. However, due to persistent symptoms, MRI was performed, which showed an ill-defined lesion involving the NAC and extending into the areolar region, with features suspicious for malignancy. FNAC revealed an abscess, and a trucut biopsy showed chronic granulomatous inflammation.

To confirm the diagnosis and rule out malignancy, a wide excision of the lesion was performed. The final excision biopsy report showed features of fibrocystic disease with epithelial hyperplasia, focal areas of chronic mastitis, and occasional foci of atypical hyperplasia. There was no evidence of malignancy. The patient recovered uneventfully and remains asymptomatic on follow-up.

DISCUSSION

This case illustrates a rare instance of a male patient with chronic

inflammatory breast disease, initially presenting with symptoms mimicking an abscess and suspected malignancy. While trucut biopsy suggested chronic granulomatous mastitis, the final excision biopsy revealed a more complex pathology, including fibrocystic changes, epithelial hyperplasia, focal chronic mastitis, and occasional atypical hyperplasia.

Fibrocystic disease and epithelial hyperplasia are uncommon but recognized in the male breast, often in the setting of hormonal imbalances or chronic inflammation. Atypical hyperplasia in male breast tissue is rare but clinically relevant, given its potential premalignant nature. Inflammatory changes such as chronic mastitis may coexist with benign proliferative lesions, complicating both radiologic and histologic interpretation.

This case underscores the diagnostic difficulty in distinguishing between benign, inflammatory, and pre-malignant breast conditions in men. It highlights the importance of histopathological confirmation, especially when imaging suggests neoplastic processes. Surgical excision played a dual role: providing both a definitive diagnosis and symptom resolution.

CONCLUSION

Chronic mastitis, fibrocystic disease, and atypical hyperplasia are all rare findings in male breast tissue. Their coexistence in a single case presents a unique diagnostic challenge and emphasizes the need for comprehensive evaluation of male breast lesions. Histopathology remains the cornerstone of accurate diagnosis and helps avoid overtreatment in cases initially suspected to be malignant.

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